

The Listener

Published weekly by the British Broadcasting Corporation, London, England

UNIVERSITY OF ILLINOIS
LIBRARY

JAN 12 1960

CHICAGO



'Pierrot and Harlequin', by André Derain

CHRISTMAS NUMBER

The Liberal Arts in U.S.A.

By D. Daiches Raphael

The Future of Man

By P. B. Medawar, F.R.S.

A Day with Churchill

By Michel Saint-Denis

What is Cosmic Dust?

By Robert Wilson



Holiday Lectures for Boys and Girls

at 11 a.m. in the Lecture Theatre—ADMISSION FREE

Tuesday **LEONARDO DA VINCI**

Dec. 29th by C. H. Gibbs-Smith

Wednesday **DO YOU KNOW YOUR LONDON?**

Dec. 30th by Miss H. Lowenthal

Friday **TEA AND FURNITURE**

Jan. 1st by John Lowe

ADULTS ADMITTED IF ACCOMPANYING CHILDREN

Professional Training for Child Care Officers

Trained child care officers are urgently needed. This is a worth-while career for men and women in an expanding service. One-year courses are provided at the Universities of Birmingham, Bristol, Liverpool, Southampton, and the London School of Economics. Men and women with University qualifications in social science are eligible to be considered for all courses. Qualified teachers, health visitors, and graduates in other subjects, with experience of social service are also invited to apply. Grants are available towards fees and maintenance. For courses starting in October, 1960 candidates should apply now, and in any case not later than 31st January, 1960. Write to the Central Training Council in Child Care, (A4), Room 518, Horseferry House, Thorney Street, London, S.W.1.

MONEY MATTERS

Investing in a Building Society

The **PLANET**, a founder member of the Building Societies Association, was one of the first Building Societies to be given TRUSTEE status for its deposits.

The **PLANET** was established in 1848 and it has been under the same management for over a quarter of a century.

The **PLANET** has assets of well over £11,000,000 and Reserves exceeding £500,000.

The **PLANET** exists to foster Home-ownership. In this field it finds ample opportunities for the satisfactory employment of its Funds.

3½%

NET, PER ANNUM

equal to **£5.14.3** per cent on investments taxable at standard rate

No cost at all on investment or withdrawal

Write for details

THE PLANET BUILDING SOCIETY

Planet House, Finsbury Sq., London, E.C.2 Tel: Monarch 8985

(Member of The Building Societies Association)

BRANCHES AT CHELMSFORD, ILFORD, MAIDSTONE, ROMFORD, WORTHING

RESEARCH INTO DIABETES

★

One day a cure will be discovered for diabetes. That day will arrive the sooner if research into its causes and treatment is generously supported not only by the diabetic community but also by all people of goodwill. Sir Basil Henriques will broadcast an appeal for the British Diabetic Research Fund on Sunday next on the Home Service at 8.25 p.m.

Please listen.

Donations to this good cause will be gratefully received by

Sir Basil Henriques, C.B.E., J.P.
British Diabetic Research Fund
152 Harley Street, London, W.1

Very High Finance

may not interest you. But the ordinary finance of "ordinary" people certainly does. And it interests us, too, since we are experts in money. Why not let us have the pleasure of looking after yours? Don't make the mistake of thinking that it is too small for us to bother about. "Bothering" about other people's money is where we shine.

DISTRICT BANK LIMITED

Head Office: Spring Gardens, Manchester, 2
London City Office: 75 Cornhill, E.C.3
and 560 Branches

Plan ahead

"The young man's policy" gives to a man under age 35 immediate life assurance cover at low cost and the valuable right to effect within 10 years further assurances even though his health has become impaired.

Apply now to

The Equitable Life Assurance Society

(founded 1762)

19, Coleman Street, London, E.C.2.

REGISTERED AT THE G.P.O.
AS A NEWSPAPER

We cannot control nature, of course. Floods in Japan, a burst dam in France, almost every day some unforeseen disaster, and in this country the constant toll of death on the roads, work their dreadful havoc of death and suffering. But that does not defeat us. It is just out of such things that faith wins its victories and points us to the world of God beyond. We cannot, most of us, control our human environment very much. We see good Christian folk still bitterly and cruelly treated under Communist rule by

people who strangely think that because they deny belief in God they must also try to exterminate any noble belief of man in himself as well. In many countries Christian folk are in small minority churches, in addition to carrying their own burdens, sharing in all the burdens and achievements of their people, few in number yet respected for their lives and often exercising an influence for good out of all proportion to their number.

World Refugee Year is a grand evidence (the idea started in this country) that the conscience of mankind is oppressed and burdened with the miseries of the homeless and the refugees. A new attempt is to be made by the Western nations in concert (surely in concert with Russia too, if possible) to remedy the appalling ills of undernourishment and overpopulation and economic instability of the Eastern peoples. All this is in a true sense home-making, and must rejoice the Christian heart. It is a message from Bethlehem of God's peace to men of goodwill permeating the hearts and minds of many.

The homelessness is perhaps at its most tragic in South Africa, where Christians themselves are divided, and the family is split: on the one side those who believe sincerely in *apartheid* and in separated homes and homelands for Africans; and on the other those who are convinced that if South Africa is the homeland of different races, those races must be at home with one another in the deepest spiritual sense, ready to and learning to worship with one another in the same faith, in the same fellowship, in the same sacraments, and therefore in a common life shared, in a partnership of growing together. It is by no means all darkness in South Africa. In not a few ways the light is shining through the darkness and beyond all doubt it will not be encompassed by the darkness, but will grow.

In central Africa there is the same conflict between the light of a Christmas faith in which European and African are growing to be at home with one another, and of a darkness which separates them from one another. The tragedy is that all desire in their

hearts the same thing, a home together in one homeland and for the varied races. But some want to go too fast and to use unhomelike methods; and some want to go too slow as though there never could be a home. Perhaps in central Africa more than anywhere else, this Christmas-tide, the conflict between the darkness and the light is visible and terrifying. But everywhere the same darkness is visible, and the same light shining from the Cross of Christ and traced back to its source in the great event in Bethlehem. I dare to think that this present going to and fro of statesmen visiting each other is a triumph for the spirit of Christmas and of Christ. Herod would not go himself to see what had happened in Bethlehem: he consulted the experts and then tried to deceive the honest seekers. When Our Lord wished to reconcile us men to God, he came to visit us in person. Every reconciliation, every happiness, comes from persons getting to know each other, and I expect themselves too. Only then can Christ add himself to the number and the Holy Spirit do his work. Wherever two or three are gathered together, there is a family and Christ makes it a home.

Christ our Lord is at work in the world. He is certainly at work with his own people in the Churches. The family of the Churches is daily becoming more homelike, as they grow in charity and personal confidence and the power to worship and to work together. I pray that the same is true in your own place, your own family, your own heart: and that you are joyfully doing your part to make it true everywhere. It all goes back to Bethlehem. Without Bethlehem we are all earthbound still, and earth is nothing but a prison from which no journey to the moon can free us. Our Lord flings open the doors of the eternal from which he came, his home and ours by his grace. So we can turn as he did to making our temporary home on earth as good and happy, or indeed as faithfully sacrificial and loving, as we can. Here is glory. Here is God. Come: let us worship and adore the Christ, born to be King, mighty Saviour, Prince of Peace.

—General Overseas, Pacific, and North American Services

Unrest in Natal

By KEVIN HOLLAND

SEVERAL months ago the most 'English' Province in South Africa exploded on the front pages of British newspapers with reports of riots and pictures of policemen attacking African women with batons. Since then there have been many more reports of violence and arrests. At the same time, white politics have been disturbed by two quite different events: the resignation of the Executive Committee of the Natal Provincial Council and the split in the United Party which deprived it of nearly a quarter of its M.P.s. This split was precipitated by the party's leader in Natal, so it is there that recriminations have been fiercest. Not since the siege of Ladysmith in the Boer War has Natal been so much 'in the news'.

The Durban riots were exaggerated in many British newspapers. It has since become clear that the city was not under siege. Its winter holiday season went on uninterrupted, and most visitors 'lizarding' along its *apartheid* beaches could not have said just where the incidents were taking place. But this is no reason for underestimating the importance of what has happened.

The increasing militancy of African women is one of the most significant things in South Africa today. Until a few years ago protest demonstrations by African women were unknown in the Union. They are now common. The apparent parochialism of the causes of the riots in Natal has puzzled many people, South Africans included. The Durban riots were provoked by police raids on supplies of liquor produced and stored by women in the locations. Africans are forbidden by law to possess or to drink spirits, though the men may drink a weak 'kaffir beer' sold to them in municipal beer halls. Their womenfolk therefore produce illegally a potent drink, and sell it in the slums to supplement their meagre budgets. But police raids on these liquor supplies

have been daily occurrences for as long as most people can remember. The disturbances in the country areas, on the other hand, were provoked by a change in regulations relating to the dipping of cattle. This change was a minor affair by comparison with other things that have happened in the past; yet we have been told that it bonded African women together in the country districts, inspiring them with such fury that they defied a well-armed police force, and in some cases resorted to arson. In short, neither the rural nor the urban riots are sufficiently explained by their immediate causes. What then does explain them?

The Government has, as usual, blamed both sets of occurrences on the African National Congress; but this is not convincing. While A.N.C. organization in the cities is poor, it is almost non-existent in the country. The only reported instances of women greeting the police with the thumbs-up sign of the A.N.C. occurred in urban areas, and even here the thumbs-up sign was probably the only thing the women knew about the A.N.C. An appeal against violence issued by the Congress's President, Mr. Albert Luthuli, had no effect in the country. A.N.C. officials expressed more surprise than anyone else over the mobilization of women in rural areas. Just over a year ago I found almost no Africans in country areas who knew anything about the A.N.C. A look of genuine puzzlement invariably accompanied the response: 'The African National Congress? What is that?' However, they do know about the Government—*uHulumeni*. The Zulu word *uHulumeni* is the same for the local magistrate or native commissioner and for the Government whose laws he has to administer. And money—*imali*. Yes, they had a lot to say about that too—if they knew you were not from the *uHulumeni*.

These two things, Government regulations and poverty, link

the urban and the rural riots. African women were in fact first launched into protest by the Government's decision to make them carry passes like those with which their men had always been burdened. As far back as 1942 the Secretary for Native Affairs himself headed an inquiry which reported that since the pass laws constantly harassed and interfered 'with the freedom of movement of natives . . . [they gave rise] to a burning sense of injustice', and that for this reason 'it would be better to face their abolition'. At the same time, the Minister of Native Affairs revealed that in the three preceding years more than 270,000 Africans had been convicted for offences about passes in the Transvaal alone. This, he maintained, was a 'devastating indictment' of the pass laws—particularly, as he took care to add, no one could 'call this offence a crime'. But the pass laws still remain, and the number of convictions for offences against them is now fantastic. It is fair to say that they are associated with the fine or spell in prison imposed on almost every African male at least once in his life; and that it would therefore be unreasonable to expect African women to accept these undoubted hazards without strenuous protests.

In 1956 thousands of women from all parts of the country camped in front of the Union Buildings in Pretoria to present the Minister with a great pile of protest forms. In the capital of Natal, more than 600 women were arrested for staging a protest march without permission. The official euphemism, 'reference books', could not cleanse them from their association with a collection of laws responsible for more ill-feeling and injustice than the sum of all other laws.

Feeling against the pass laws was increased when it was found that they could be used to interfere with expressions of protest against other injustices, as happened during the 1957 'bus boycott' on the Rand. The Minister of Transport announced that the Government would 'smash' the boycott. Some 14,000 people were indicted after sorties by the police into African townships. All but a few hundred of the offences were 'petty crimes', most of which were infringements of regulations about passes. These figures were given by the Minister of Justice and offered as a vindication of intensive police activity against the boycott.

It has been said that these and a vast number of other laws exist to help Africans—but Africans feel they do the opposite. The Minister of Bantu Education was franker when he addressed his supporters last August. He explained that every one of his Government's laws concerning Africans aimed at ensuring the political and economic 'paramountcy of the white man in South Africa'. Yet the present crisis would not be as acute as it is if African poverty were not everywhere confronted by white affluence. The 'bus boycott' of 1957 was caused by an increase of one penny on a single fare. After the customary charge of mass intimidation had been made and some of the excitement had died down, it became clear that the boycott had been successful just because the majority of Africans already earned much less than was necessary to maintain a

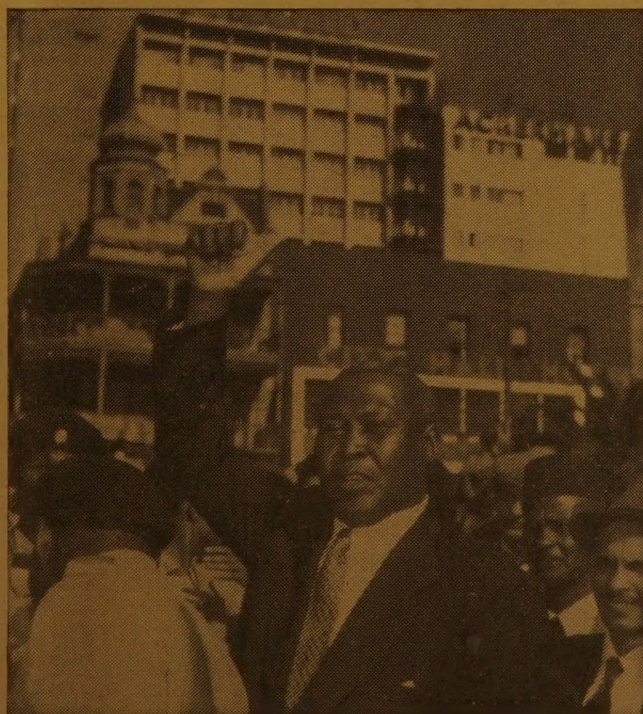


'The increasing militancy of African women is one of the most significant things in South Africa today': women, armed with staves, taking part in riots in Natal in August

minimum standard of living. Similarly, at the time of the Durban riots, the head of the city's African Administration Department presented a report estimating that 95 per cent. of the local Africans lived well below the bread-line. Again, after the initial hysteria, it was widely accepted in the local press, and endorsed by the mayor, that poverty, above all, was responsible for crime, instability, and unrest. Social workers have been saying this for years, but every now and then some dramatic incident prods the conscience of employers into a verbal acceptance of this fact; yet the gap between African wages and the increasing cost of living continues to widen.

Meanwhile, the importance of events occurring in the once-mute rural areas has been recognized by the authorities, as is shown by a remarkable improvement in the behaviour of the police in handling the women. The President of the African National Congress, from the remote area to which the Minister of Justice has consigned him for five years, publicly praised the conduct of police, which often deliberately avoided giving provocation to the women. It is in the country areas that white interests

are most vulnerable: the coastal belt of sugar-cane fields, the timber and the grasslands of the interior, become tinder dry in the South African climate. It is in the country too that the Government is making a show of developing the vestigial Bantustans, or separate Black States, outlined by Dr. Verwoerd in parliament this year. Already ominous rumblings have been produced in them by the Government's banishment of popular chieftains who would not accept its policies. In May this year the representative for the Transkei reported in parliament that people at a meeting had refused to salute the Paramount Chief, merely laughing at him when he threatened them with a shot-gun. At another meeting a pro-Government chief was driven off with shouts of *voetsak*, the word normally used for troublesome dogs. Political killings and assaults were also reported. Once the African 'peasants' have taken their first open step in defiance of the



Mr. Albert Luthuli, President of the African National Congress, giving the Congress salute

Government, the forecasts of revolution so often made begin to seem more plausible. No responsible person believes that a revolution would be successful, and for this reason the Congress Movement consistently opposes violence. They know that the result would be to turn South Africa into an armed camp. Perhaps it was in anticipation of this development that in June this year the police force took delivery of the first batch of eighty armoured vehicles ordered from Britain.

A Change in White Attitudes?

Against this background of African unrest the disturbances in white politics may appear to be of less importance; yet I think they are symptoms of a change in white attitudes. The unprecedented resignation of a Provincial Executive Committee occurred as a result of the Government trying to force upon Natal its own favourite for the vacant post of Deputy Director of Education. The Committee declared that he was totally unacceptable to the Province, that nothing would induce them to appoint him, and they had already nominated the second most senior man in their education service. They regarded the Government's action as an encroachment on the small field of provincial autonomy guaranteed by the Act of Union (1910). As a result of legal proceedings the Natal Supreme Court overruled the Provincial Executive and appointed the government nominee. The same Executive Committee is now back in office.

Although autonomy was certainly the main point, there is an important underlying issue here that I believe is not generally understood in Britain. The Province's defiance led Cabinet Ministers to issue additional threats that a uniform system of education would be imposed on all the Provinces. This last threat made many English-speaking people aware of something called C.N.O., or *Christelik-Nasionale Onderwys*, which is Afrikaans for Christian National Education. C.N.O. is a plan (but not yet a policy) for education, published in 1948 under the auspices of the Federation of Afrikaans Cultural Societies. Its sponsors included a Cabinet Minister and the late Governor-General. The document in which it is set forth is not readily intelligible, but its main features are clear. According to its preface: 'Afrikaans schools must not merely be mother-tongue, . . . they must be places where our children will be saturated with the Christian . . . national spiritual and cultural stuff of our nation'. 'Christian' is defined as conforming to the creeds of the three Afrikaans Churches; 'national' as being imbued with love of one's own language, history and culture. Authority in schools, it says, is borrowed from God, and the Church should exercise the necessary control over the doctrine and lives of the teachers. Any teacher other than a Christian [as previously defined] is, in the words of the document, 'a deadly danger'. With regard to higher education, the curious statement is made that science should be expounded in a positively Christian light, and contrasted with non-Christian science.

Two Acts on University Education

It now seems unlikely that the Government will actually pass legislation to give effect to this document, seemingly intended only for Afrikaans schools, of which there are not many in Natal. The document, however, sets forth other aims, some of which have already been secured by legislation. Article 15, for example, makes explicit the notion of *apartheid* implicit in previous sections. The welfare and happiness of Coloureds, it says, lies in their understanding that they belong to a separate racial group, while African education should be based on the principles of white trusteeship and segregation; it should aim to inculcate the white man's view of life, especially that of the Boer nation, which is the senior trustee. Some years ago the Nationalist Government withdrew state grants from private schools for Africans, thus making their independent existence almost impossible. This year, two Acts provided for the transfer of African university education to a newly established ministerial department. At Fort Hare, one of the university institutions which will soon be taken over, nine members of staff have been told that the Government will not require their services. Although they were not given reasons for this decision, the Minister, in a public speech, stated it was because they were opposed to *apartheid*—which is to say, they failed to satisfy Articles 9 and 15 of C.N.O. When a new

Afrikaans university was established in the Free State, the customary clause guaranteeing freedom of conscience was omitted from its Charter. This omission has now been repeated in the case of Fort Hare.

In most Transvaal schools education is conducted through the medium of one or other of the two official languages, Afrikaans or English. When a child reaches school age he has to submit to a language test, which decides to which kind of school he will be consigned. It has often happened that children of English-speaking parents have been forced to go to Afrikaans schools. In all these schools, a book 'guide' is in force. The 'guide' lists a curiously limited number of books which may be read by staff and students without special permission being required. Both the language test and the censorship of books could be forced on Natal if the Government were able to carry out its threat to 'standardize' education throughout the country.

These are the matters that lie behind the more limited question of the Government's nominee to the Natal Education post, and they bring us directly to white politics.

The United Party has always been the most divided, and the split which occurred in it this year is surprising only for the reason that it took so long to happen. Although it has suffered defections in the past its irreconcilable elements have been held together by a sense of opposition to the excesses of the Nationalists. In fact, it has always had the support of the neo-Nationalists, as one would expect from the fact that it was the offspring of a marriage with Nationalists in the early nineteen-thirties, and that its first leader, General Hertzog, was a Nationalist. Recent years have seen a growth in its progressive wing, but its more numerous conservatives have increasingly dominated its policies. The progressives, nevertheless, still hoped that they would be able to reverse this policy trend by exerting internal pressure.

'The New Vision'

Then, this year, as if in answer to taunts by the United Party that the Nationalists could produce no coherent account of *apartheid*, Dr. Verwoerd at last published his Bantustan vision. What Dr. Edgar Brookes had called 'Government by incantation' seemed now to have ended, rendering obsolete its corollary, opposition by incantation. The official opposition was caught without a common ground for opposing 'the new vision'. The party's Natal leader, Mr. Douglas Mitchell, had no difficulty in denouncing Dr. Verwoerd's scheme as 'liberal', an abusive epithet in South Africa. At the United Party's annual congress this year Mr. Mitchell insisted on getting a vote taken on a resolution rescinding a pledge given by the party in 1936 to acquire more land for Africans. The leader of the party, Sir de Villiers Graaf, having vainly pleaded with Mr. Mitchell not to move this resolution, felt compelled to vote against it. Mr. Mitchell argued that keeping this pledge would make the Opposition a party to the Bantustans. The congress accepted this argument by a large majority, the pledge was withdrawn, and the party's progressives felt compelled to resign. They considered that Mr. Mitchell's attack was fundamentally directed at them, at the liberals in the United Party itself; so at long last the division in the party turned into a resounding split.

It has surprised everyone that in the provincial elections that followed shortly after the split three progressive candidates stood—all of them in Natal. Although none of them was elected, they jointly polled about 45 per cent. of all the votes cast in the seats they contested—and this in spite of the fact that they then had no party, no funds, and no official policy. This is evidence of a swing in white opinion away from both the Nationalists and the conservatism of the U.P.—a trend confirmed by the electoral fortunes of the Liberal Party, which is well to the left of the Progressives. For example, in the Nationalist stronghold of Pretoria East, which the U.P. did not even contest, a Liberal Party candidate polled about 20 per cent. of the votes cast.

This swing away from the right, seen against mounting non-white unrest, picks out two major contestants. The issues are no longer obscured by political 'marriages of convenience'. The swing may already be too small and too late to be significant, but those who wish to see if this is so would do well to keep their eyes on Natal.—*Third Programme*

Talking to the Russians

SIR WILLIAM HAYTER on the future of Anglo-Soviet relations

Sir William Hayter, who was formerly British Ambassador in Moscow and is now Warden of New College, Oxford, has recently broadcast four talks in the Russian Service of the B.B.C., of which this was the last

I DO not much believe in predictions about the future. Not many people in the West now believe in historical inevitability. We know that Marxist doctrine is supposed to provide an accurate guide to the future, but this guide has often led its followers astray, and many of Marx's predictions look foolish now (for instance, the one about the progressive impoverishment of the workers under capitalism). Still, it must be possible to detect some trends now that can lead towards the future.

The Question of Class

In my first talk* I said that no real peace, no lasting confidence between the great nations of the world, will be possible as long as the class war continues. It is the class war, not international rivalries, that now threatens the peace of the world.

Class warfare does not, I must stress, animate the governments and the peoples of the Western Powers. The classes in their own countries often have conflicting interests. But they have worked out ways of settling these conflicts, and class antagonism, instead of sharpening, is already infinitely less acute than when Marx wrote, and is steadily diminishing. If this is so, we are even less likely to prosecute the class war on an international scale.

But the Soviet Government does not see things in this way. To them the class war is a good war, to be prosecuted by all the available means. Here lies the great danger to peace. For most people in most countries now there are no good wars. Only the Communist governments now talk of good and just wars, the wars of liberation of classes. We in the West make no such exceptions. The only war we justify is resistance to an aggression; our public opinion never justifies an aggression, even when it is in aid of a cause as noble as liberation. And liberation is, of course, a word that has been much abused in the past. Fortunately I think we are all, in both parts of the world, beginning to realize that no cause, however noble, is advanced by war as it now is. We must settle our differences in other ways.

The Soviet Government is apt to say that we must prosecute the struggle by economic competition. We look at things rather differently. We do not think there need be a struggle at all. We should learn to live together without a struggle, to see what each of us can contribute to a general advance of prosperity in the world without aiming at victories over others, whether in economic competition or otherwise. But if the Soviet Government wants economic competition, not co-operation, then we are ready for it, and certainly it is preferable to other forms of competition. And indeed this competition, whatever its motives, may in the end lead to a general advance of prosperity. Mr. Khrushchev often talks of overtaking the standard of living of Western capitalism. But this is not standing still, it is going forward. The policy of the British Government is to double our standard in twenty-five years, and the movement is this way. So, to catch us up the Soviet Union does not have to reach where we are now; it has to reach where we shall be in years to come. And perhaps we shall be spurred on by this competition to go even faster. I like to think of the Soviet Government helping to raise the standard of living of capitalist countries.

Unless some frightful blunder or miscalculation by one side or another lands us into a mutually destructive war, it looks as if this world of economic competition is the one in which we are going to have to live. Our duty is to see how we can best reduce the dangers of an explosion that would interrupt this peaceful competition and wreck everything. We in Great Britain were all unreservedly glad when President Eisenhower invited Mr. Khrushchev to visit the United States. We are strong believers in the

value of continuing negotiations. We looked upon this visit as a step in this process, a process that began when our Prime Minister visited Moscow last winter. Most of us hope that a Summit Conference can be arranged soon, and that it will be one of a series.

A Common Interest

At none of the meetings in this series shall we be able to settle the world's differences. They are too wide and deep for that. But at each one we ought to be able to make a little progress towards the solution of individual problems, the kind of problems that if left alone build up the explosive situations which we all dread. We all know we have a common interest in doing this, however wide our ideological divergences may be. These ideological divergences, while they last, will prevent real peace. But they must not be allowed to lead to real war. It is the task of our leaders to see that these problems are kept under control.

But we ought not to leave all the work to our leaders. Every individual citizen in all the countries involved in the East-West struggle on both sides has a part to play. Ordinary people in all countries have, it seems to me, two principal duties in this field. First, their duty is to make plain to their own leaders what they expect of them. This is surely that they, the leaders, should settle their differences with each other, should leave other countries to enjoy the régime they choose and should cease to project their own ideological preferences and ideas into the realm of international affairs. The second duty of the ordinary citizen in any country is to try to inform himself as fully as possible about the realities of other countries, not to be misled by the stereotypes of propaganda but to find out what foreigners are really like, what they want, and why they behave as they do. The more we each of us understand this the less likely we are to be stampeded by ill-disposed leaders or unlucky events into attitudes of hostility.

There are various ways in which we can set about acquiring this understanding. The best is to see for ourselves. More Soviet citizens ought to travel abroad, not in organized parties but as individuals, able to talk freely to the people in the countries they visit. Millions of Englishmen and Englishwomen go abroad every year, and millions of foreigners visit Great Britain. Foreign travel to and from the Soviet Union is growing, but it is still a long way from this scale, and too regulated.

Choice in Culture

Then there should be much greater freedom to read foreign books, see foreign films, listen to foreign broadcasts. Soviet propagandists have said that the Soviet Union must not be flooded with 'corrupting foreign filth'. In our country, when children are young their parents tell them what they may or may not read. But when they get older they are allowed to choose for themselves. I believe that the Soviet people is sufficiently adult not to have its reading dictated to it by the authorities. I do not suppose it will choose filth. But it is better to be allowed to choose filth than to be treated as a child.

I do not despair of Anglo-Soviet relations. I think we may be heading for better times. When the Soviet state was growing up, in difficult economic conditions and in what could plausibly be represented as a state of capitalist encirclement, it was perhaps not unnatural for the state authorities, and even the people, to have a feeling of suspicion and resentment against the rest of the world, and in particular against Great Britain, which at some periods might have seemed to be the leader of the anti-Soviet forces. But the Soviet state is now strong, prosperous, and stable. It need fear no one. The only thing it has to fear is war, from which it has much to lose, as much as anyone. It shares a common interest in peace with all other countries, including Britain, which is perhaps the most vulnerable of all to the horrors of modern war. We must all work together to protect this common interest.

The Listener



BRITISH BROADCASTING CORPORATION, LONDON, ENGLAND, 1959

The yearly subscription rate to THE LISTENER, U.S. and Canadian edition is \$7.50, including postage; special rate for two years \$12.50; for three years \$17.00. Subscriptions should be sent to B.B.C. Publications, 35, Marylebone High Street, London, W.1, England, or to usual agents. Entered as second-class mailing matter at the Post Office, New York, N.Y. Trade distributors within U.S.A., Eastern News Company, New York 14, N.Y. All communications (including letters for publication and poems which may be submitted accompanied by stamped addressed envelope) should be sent to the Editor at 35, Marylebone High Street, London, W.1, England.

Seasonal Spirit

ALL who now celebrate Christmas are giving continuity to a festival that has grown up round a threefold tradition. One part of this is the deep spiritual significance of Christmas in the calendar of the Christian Church. Another part is the broadly spread idea of generosity between man and his neighbour, the giving of presents in a way that probably derives from the ancient custom of present-giving on January 1, the Roman Feast of Kalends. Here is an instance of a pagan rite that has been reinvigorated by Christian feeling and wide diffusion of the Gospel story of the Three Kings. A third part of the tradition is the conception of the festival as a time of relaxation and laughter, so often symbolized by the figures of harlequinade that appear on our cover. These not only echo the customs of revelry and high spirits that during the Middle Ages were typical of the Feast of Fools and the Boy Bishop ceremonies held at this time of the year; they are representative in the modern world of the children's party, the pantomime, and the visit to the circus.

Christmas has also become—as the Archbishop of Canterbury today points out—‘the special festival of the home’. It provides a fine opportunity for members of a family to reassemble in their homes, to invite children or relations to a meal and to ask also any friends or older people who may be lonely at such a time of rejoicing. Nothing is more pleasant for the members of a household than to gather in front of a roaring fire, entertained by the delights of the company, not to mention the special food and drink. ‘This’, as Mr. Pickwick declared at Mr. Wardle’s Christmas party, ‘is comfort, indeed’. It is to be hoped that in as many European homes as possible this week some sort of party will take place. In part of a talk that we now print, Mr. Sam Pollock refers to the pleasure of being snugly indoors at such a gathering. Yet there can be no doubt that many this Christmas will spare some of their thoughts for those who are far away, in the cold chill of a lifeboat or a lighthouse, stationed inside the Arctic or Antarctic circles, or perhaps keeping watch on some political frontier near the Equator, but all many hundreds of miles from their homes.

Much of the world’s safety depends on the vigilance of such men and women, and apart from the inner satisfaction of a job well done, they are no doubt likely to receive letters from their families telling them they are not forgotten. They can also perhaps derive satisfaction from one incidental characteristic of their circumstances. They may be facing the elements of nature; but at least they are clear of the fury of last-minute shopping. For commercial reasons, the Christmas season may now begin earlier in the shops, and there may be letters of protest on the subject in the newspapers, but no ordinary member of the public ever seems to be buying his presents in time. So all must rush against one another in a rough-and-tumble not to be surpassed until the January sales. Yet, underneath, the motives of each are inspired by generosity. As the Greek writer Libanius said when, in the fourth century, he came to describe the original Kalends Festival: ‘A great quality of it is that it teaches men not to hold too fast to their money, but to part with it and let it pass into other hands’.

What They Are Saying

Christmas shopping in Russia

A RECENT MOSCOW home service programme featured a dialogue between a male and a female announcer about New Year gifts. The male announcer said he was appearing in the role of ‘Grandfather Frost’ to give certain New Year presents, in the old year, because he ‘wouldn’t like anybody to start off a happy new year with them’. The first gift was an Irtysh radiogram for the manager of the central cultural organization in Chita. ‘Let’s switch it on and listen to a nice little song’, suggested the female announcer. ‘Where are the needles?’ she added. The male announcer replied:

That’s the question other owners of these radiograms are asking every day. Where indeed are the needles for the Irtysh radiogram? Where can you buy them? When you ask at the cultural organization in Chita they only shrug their shoulders.

The second gift was a man’s jacket for the head of the technical control department of a certain industrial combine. It had been sent in by a listener in Stavropol. Said the male announcer:

I wouldn’t advise anybody to wear this jacket, especially with a light shirt! The shirt will go black. The only good thing about this lining is that you can use it as a dye. As they say, it’s an ill wind!

The third present was a pair of socks for the managers of the trading organizations in Chemkent. The female announcer asked:

Can the mums and dads of Chemkent get children’s socks? There are no socks. That is why we propose sending a pair of socks to the town trading organizations to remind their managers that this item of clothing does exist and that it is absolutely essential, especially in winter.

Another Moscow home service broadcaster related how he had visited a department store in Stalingrad in search of gramophone records of classical music:

The girl assistant was obviously confused; she shrugged her shoulders, looked sadly at the shelves, found Tchaikovsky’s *Sérénade Mélancolique* with some difficulty, and said: ‘You know, there is no demand for these records. Nobody wants them’. There were no other Tchaikovsky records. The record catalogue was a filthy notebook. There was not a single Beethoven or Mozart symphony to be had; no work by Bach, Glinka, Musorgsky, Borodin.

Yet another speaker on Moscow home service described ‘a fine new palace of culture’ in a town in the Kuban. The people had thanked the comrades who had constructed it, but they had not thanked the furniture factory which had made the chairs for the auditorium:

The trouble is that you can only look at the chairs; you cannot sit on them because they creak. As visitors to the Palace of Culture prefer to listen to what is going on on the stage, and not to furniture squeaking, it is easy to sympathize with their justified complaint to the furniture makers.

Laudable as were these efforts to ‘ginger up’ Soviet factory managers, technicians, and shop-assistants they nevertheless help to put into perspective lofty abstractions such as the following from an article in *Pravda* broadcast for overseas listeners:

Communists have always been certain, and never more than now, of the superiority of their ideology—which reflects the fundamental interests of the working class,—over the ideology of the bourgeoisie, the class which is on its way out and doomed by history.

It is interesting that the ‘Voice of Free Africa’ in Swahili was last week at a loss to find a way of attacking the recent announcement by the British Governor that there is to be a swift advance to self-government in Tanganyika. Cairo radio likewise found itself unable to criticize the Tanganyika reforms:

We would here like to extend our congratulations to the people of Tanganyika, together with their leader Mr. Julius Nyerere, for their efforts which have enabled them to reach this stage which is a great stride towards the freedom of East Africa. We hope that other East African territories will take the advice of Mr. Nyerere and will follow in his footsteps.

—Based on information collected by the B.B.C. Monitoring Service

DERRICK SINGTON

Did You Hear That?

CHRISTMAS IN MEXICO

'IN MEXICO CITY, in the windows of stores', said IRENE NICHOLSON in 'Woman's Hour', 'sets of the three wise men are being advertised for the equivalent of £10—and I wonder how they are ever sold, for out in the villages they are baking little figures for the traditional cribs. They are so charming, these crude, peasant modellings of Mary and Joseph and the Baby and the beasts. Unbaked, they are heaped in their hundreds, all higgledy-piggledy; then sticks and logs are piled on top and a great bonfire lighted. Out of the fire, miraculously, about half the little figures emerge unbroken. Then they are painted in crude colours, in which fuchsia pinks and shocking reds predominate. Candlesticks are made, too, with as many branches as an old tree, each one hung with tiny clay birds and fishes, while the central trunk is a strange kind of totem pole, with donkeys on the shoulders of little men, and then more little men on top of donkeys—like a fairy tale by the Brothers Grimm.

'These and other decorations will take a central place in the *posadas* which go on night after night for the twelve days before Christmas. The *posadas* are supposed to represent the vain search of Mary and Joseph to find a lodging in Bethlehem. Parties of Mexicans go, traditionally, knocking at their friends' doors, and singing. They are invited in to eat and drink good things.

'There is a special treat for the little ones in these festivities: the *pinatas*. *Pinatas* are big, round, clay bowls filled with sweets and then covered with crêpe paper and made to look like curly white lambs, or parrots, or any other creature. The *pinata* is then slung over the branch of a tree with a long rope, and one by one blindfold children hit at it, while Daddy, at the crucial moment, tugs on the rope and sends the clay bowl jumping up, out of harm's way. At last, when Daddy himself is quite exhausted, he lets one of the strong boys give it a good whack with the stick, the bowl breaks, and there is a scramble for the sweets.

'This game goes on out of doors because in Mexico City the sun is hot even in December though it is bitterly cold at night. The gardens are bright scarlet with poinsettia, the Christmas flower, and even roses are still blooming'.

LA VIE ANGLAISE

'One of the latest attempts to make us see ourselves as others see us is a booklet of more than 100 pages, just published in Paris', said THOMAS CADETT, B.B.C. Paris correspondent, in the Home

Service programme 'From Our Own Correspondent'. 'It is written by Tony Mayer, a Frenchman, and entitled *La Vie Anglaise*. It is certainly appreciated by the French, for it is selling like hot cakes. In fact, I had to wait for a new edition to come out before I could get a copy. It is a very quotable work as you will see from the opening paragraph of the introduction:



Blindfold Mexican child trying to break the *pinata* at a Christmas party on the shore of Lake Chapala



Mexican pottery figures arranged for a Christmas scene

Ten minutes' flight away from the coast of France lies a strange country. In it the metric system is unknown, judges wear wigs, central heating is held to be unhealthy, sardines form the last course of a meal, and the law forbids Sunday opening for theatres. And yet, the first jet plane was built there, its agriculture is the most mechanized in the world and, no doubt, England will be the first country to use atomic energy for industrial purposes.

'Then, after a reference to the mixture of exaggerated correctness, condescension, brutality, and suspicion with which port authorities greet foreign visitors to England, the author really gets down to brass tacks. His first chapter is a summary of English history from the Norman invasion onward. It is a workmanlike job on the whole, even if he does allude to the annexation of Scotland by England. From there, he goes on to geography and, of course, the weather. This, he says, the English never cease talking about and never do anything about.

'Next comes religion. Unlike Voltaire, who credited the English with many religious cults but only one sauce, M. Mayer records the existence of 73,000 pubs

and 53,000 places of worship. "The English", he adds, "do not get excited about religion". Turning to psychology, he contrasts the brutal, brawling Englishman of other days with the self-disciplined creature introduced in Victoria's reign—largely, he declares, owing to the spartan code of the public school system.



Christmas Eve at Dingley Dell: one of the original illustrations to *Pickwick Papers*

Talking about the girls he says that, owing to their upbringing, they either imitate the boys or leap into their arms. The comparative merits of a hot-water bottle and an English husband also receive some attention.

"The love of the English for England—"this sceptred isle"—he finds touching, and he adds: "They think, very naively, that the English truth being fixed by essence, it is the rest of the world which has moved away from it". It is here, he remarks, that the legend of perfidious Albion finds its origin. In one chapter our railways get it in the neck: trains slow and unpunctual; stations and rolling stock out of date and dirty, and food that it would be difficult to make worse. Later, English cooking as a whole also comes in for some hard knocks, especially the restaurants: "The offensive smell coming from their kitchens is more revealing even than the taste of the dishes themselves. No wonder that the consumption of indigestion pills in Britain is so large".

"There is also a sample of social English. For instance: "As you know" means "as you don't know". "No trouble at all" means "What a sweat". And "We must keep in touch" means "Goodbye for ever".

WELCOME TO WINTER

'A few weeks ago a London newspaper sent out its reporters to find out how, so to speak, people were "taking it", after their long and un-British ration of near-tropical summer', said SAM POLLOCK in a talk in

the General Overseas Service. 'To the astonishment of the reporters, a large number of people welcomed the return of winter. Some mothers of young families said, quite reasonably, that the less genial weather made it easier to get the children early to bed. But the majority of those who welcomed the change did so on the ground that winter weather was so nice to get out of! "I mean", said one man, "what's lovelier than to sit before a roaring fire, and listen to the wind howling and the rain beating against the windows outside?"

'There is a good deal in the theory. We have a similar feeling sometimes even in our reading. Do you remember that famous Christmas Eve party around the kitchen fire at Dingley Dell in Dickens's *Pickwick Papers*? How it added to our delight—and no doubt to the delight of the Dingley Dellers themselves—that it was snowing and freezing hard outside. And how our enjoyment is multiplied if we can manage to read the passage in similar conditions—with an inclement world outside, to emphasise the snugness and cosiness of our fireside! Snugness, cosiness—they are among the most exquisite of human pleasures'.

A CALLIGRAPHIC PAINTER

An exhibition of the paintings of the Chinese artist, David Kwok, is now on view at the Commonwealth Institute, South Kensington. HARDIMAN SCOTT, a B.B.C. reporter, watched the artist at work and described his methods in 'The Eye-witness'.

'David Kwok', he said, 'belongs to the traditional school of Chinese brush painting known as the calligraphic, that achieves its effect like writing. It aims to say as much as possible with the fewest brush strokes; and, at the same time, to say it boldly, freely, unmistakably. Its great virtue is its freshness, its spontaneity. You can only say a thing once, and you must say it right first time.

'I saw Mr. Kwok at work. He completes a picture in three minutes. It looks easy but, in fact, demands the very highest discipline and skill—not to mention an extraordinary sensitivity in the artist. He does not paint from life; no Chinese artist painting in this tradition ever does. He does not build up subtle shades of tone by repeated applications of paint: all that has to be achieved with one swift brush stroke. He uses water colours, painting on rice paper, and it all has to be done while the paint is wet. In the main Mr. Kwok paints flowers, birds, animals, often primarily in shades of black with bright blues, reds, yellows, and greens heightening the composition; and many hours have been spent in the past studying and analysing these subjects.

'Mr. Kwok stood looking down at the white rice-paper. He was intensely still, as though summoning up all his resources, all his knowledge, all his years of experience into a few minutes of pure concentration. Suddenly, not only the inspiration crystallizes but the means of achieving it as well. Holding his large brushes of goats' hair, he quickly mixes from his nine basic colours with plenty of water. He stands again with the bamboo-handled brushes poised. Then it seems he attacks the paper, his brush moves freely, vigorously, great broad strokes of colour, and fine lines as thin as those drawn with a map pen, all achieved with the same brush. Quickly he paints a lotus, with a duck at the bottom of the scroll, and then an Oriental tree with squirrels in it. Forms are suggested, rhythm achieved by subtle variations of tone as well as by line. But Mr. Kwok conveys many other qualities as well: humour, for instance, or autocratic cruelty in his fine painting of an eagle, and sheer exuberance in "Autumn Fragrance", with red blossoms bursting through the angularity of branches'.



The Chinese artist, David Kwok, gives a demonstration of his method of painting at the Commonwealth Institute

A Day with Churchill

By MICHEL SAINT-DENIS

On October 21, 1940, M. Michel Saint-Denis, Inspector-General of the French Theatre, who was at that time leader of the B.B.C.'s team of French broadcasters, spent a day with Mr. Winston Churchill at Downing Street, helping him to prepare a broadcast he was to give that night to the French people. On the occasion of Sir Winston's eighty-fifth birthday, M. Saint-Denis recalled the events of that day

I WAS in the dining-room—a long, light, low-ceilinged room lit on my right by windows placed so high up that I could not see the garden outside. I remained alone, standing up. Presently I was able to distinguish through an open door at the far end of the room, in semi-darkness, the silhouette of a thick-set man in his shirtsleeves who was slowly washing his hands. He called out 'Mary!' twice in a loud voice, and from the voice I knew that it was Churchill. From a recess on his left, there appeared a thin, middle-aged woman wearing a black dress with a white apron and a starched cap. Churchill was drying his hands, standing on the threshold:

'We've got a Frenchman to lunch. Is there any wine?'

'I don't think so, sir', replied Mary timidly.

'Everything is upside down since last night's bombing. There is no wine left', Churchill sounded angry. 'Send somebody out to the nearest pub to fetch one or two bottles—white wine. It won't be good, but it will be wine'.

As he was putting on his waistcoat he caught sight of me, and like a child who has been caught out, he said in a low voice, but with a shade of mockery: 'I beg your pardon. Please sit down'.

'When I Think of That Face...'

We went together up to a small, round table in the middle of the first half of the room. It was standing rather oddly between two balks of timber which held up planking jammed against the ceiling. This was a precaution against the bombing. Almost at once there was the drone of a 'plane, followed by loud reports from our anti-aircraft guns. Then, as Churchill stabbed his fork into a piece of sausage, I heard his deep voice growling in his throat: 'When I think of that face, when I think of that moustache . . . they say he is a genius; he is not; he is the most monstrous abortion of human monstrosity'.

He was angry; he made a last stab with his fork, then, holding his napkin in his hand and looking at me, as though I did not believe him, he said: 'We shall win, my friend; we shall win because we are much better people and we have much better scientists'.

Mary came in with the wine. Churchill took the bottle and filled our glasses. And then he said: 'They will try to destroy this ancient city of ours, but for one bomb that falls on London, ten are going to fall on Berlin, for ten a hundred, for a hundred a thousand, and for a thousand, thousands of thousands'. I was astounded. The man was living the war. He was seeing Hitler, seeing Berlin. He was hurling defiance at the enemy with prophetic eloquence.

We had finished the *hors-d'oeuvres*, and tasted the wine. It was, as he had predicted, bad wine. Mary changed the plates. I made a movement towards my papers. Churchill stopped me impatiently; he was leaning forward with his arms flat on the table, squat, slow, dreamy: 'What are they doing in France?' he said. 'What are they thinking? I know old Pétain; always been a defeatist. I know Darlan, I have a high opinion of him; he has done a lot for the French Navy. I know Reynaud . . . what are they doing?'

There were tears in his eyes, his red-rimmed eyes; he turned away to wipe them with the corner of his napkin, and then he said in a deep voice: 'I beg your pardon'. He was at that moment like a dignified child standing on ceremony.

The German 'plane was back again; the drone of its engines was very loud: the guns barked sharply, they were loud and close at hand. I had finished eating, and instinctively glanced up at the ridiculous planking that was supposed to protect us. Churchill, of course, intercepted my look and waving his fork, asked me in a loud jeering voice: 'Are you afraid?'

The anti-aircraft guns were firing for all they were worth; the 'plane turned in a whistling dive. 'Oh', said Churchill, 'if it falls some distance away, we'll be all right; this is strong enough to protect us; but if it's a direct hit' (he seemed delighted at the idea, and there was laughter in his voice) 'we shall die in each other's arms like two brave men'.

Down to the Shelter

Mary had come back with the roast beef and murmured: 'You ought to go into the shelter, sir'.

Churchill smiled at her. 'Don't worry, Mary. Listen: it's over already'. It was true; the noise was decreasing and stopped as suddenly as it had begun.

At last lunch was over, but a German 'plane was back and the anti-aircraft guns were blazing away apparently from just outside our windows. Mary poured out the coffee with a perfectly steady hand, but she did not leave the room. She stayed, holding her tray, looking first at one and then at the other of us with a motherly eye, but undecided. At last she burst out: 'Sir, it's terribly noisy. You must go to the shelter'.

Churchill smiled at her and turning to me, with mock courtesy he shouted through the appalling racket: 'Let's go to the shelter, my friend. Mary wants us to go'.

He stood up and we went, carrying our cups of coffee which were much too full and spilled into the saucers. Then, led by Mary, who opened the doors in front of us, we walked along the passage of the basement as though we were playing follow-my-leader.

We found ourselves in a brand-new concrete shelter, a room about eighteen by twelve feet, with no windows, furnished with wooden seats smelling of fresh pinewood. The personnel of the house were all there. They all stood up. 'Sit down', said Churchill, 'it won't last long'.

As I stood in the doorway I noticed a telephonist wearing headphones, who was repeating a series of numbers and taking notes. I learned some months later that the telephonist was repeating in code the numbers of German 'planes in the air as revealed by radar, which was still secret and which the Germans did not possess at that time. Churchill had just said to me, 'We have much better scientists'. Churchill leaned forward and listened for a moment, still holding his cup in his hand. His face lit up with a secret smile. The noise of the guns sounded further off. 'It's over', he said, 'let's go back'.

Mary had preceded us into the dining-room. 'Would you like some more coffee?', she said.

'Yes, please, Mary, and bring the brandy'.

Discussing the Speech

I put my papers on the cleared table and explained to Churchill that the B.B.C. thought it wise to preface his speech with a short introduction, and that after speaking of the personality of the Prime Minister and his love and knowledge of France, I had recalled how ever since 1932 he had given warnings of the German menace and referred to his recent promise to restore a liberated France to full sovereignty of all her territories. After that I had compared him to Clemenceau, our 'Tiger'.

'No, no, that won't do', he cried almost at once, 'all this beginning is too long'. 'You say far too many nice things about me. They won't believe you'. He read on, but in absolute silence,

for, he had reached the part about Clemenceau. He looked up at me with moist eyes and gave me the pages of my script, saying with emotion: 'It's much too kind of you'. Then, wiping his eyes with his handkerchief, he said once more: 'I beg your pardon', but this time with a touch of shame.

I should have liked to have hugged him. He had already forgotten his outburst about the beginning, so that it was up to me to decide whether I should shorten my text or not. Mary came back with hot coffee, a bottle of brandy and two tiny glasses. Churchill grasped the bottle. 'Would you like some?'

'Now let's get to work', and we started on my translation. It was 2.0 p.m.

Not Too Correct

Churchill had re-read his original script earlier, without waiting for me, and wanted to change certain passages and, above all, to add a piece dealing with one or two important points. He showed a great feeling for the rhythm of sentences and for words which catch the ear and strike the imagination. He kept on saying: 'What I want is to be understood as I am, not as you are, not even as the French language is. Don't make it sound too correct'.

I completely understood what he wanted, but if I did not find an equivalent that would satisfy him quickly enough, he drove me without mercy. For example, we got stuck at the end of a particularly grim paragraph. The question was how to translate: 'The scientific low cunning of a ruthless police force'.

'Low cunning . . . low cunning', muttered Churchill. 'You translate it as *la bassesse et la ruse*'. That explains it, but it's no good; it's abstract, there's no bite to it. Cunning . . . haven't you a word beginning with a c? Like cupidity—*la basse cupidité*, yes, but that doesn't make sense. Have you a word like crafty? Why not *la basse et ignominieuse crafterie scientifique*?'

I laughed and objected: 'They wouldn't understand you'.

'A pity', said Churchill, 'what a poor language!'

He was satisfied when I suggested *la guigne* for 'bad luck' and was delighted when we thought of *rira bien qui rira le dernier* for 'all will come right'. And he was delighted when he suggested himself that his first call to the Resistance Movement should end with a sentence which he read all over France during the war of 1914-18: '*Les oreilles ennemies vous écoutent*'. Finally, after his first allusion to Napoleon—'Nice, Savoy, Corsica, Napoleon's Corsica will be torn from the fair land of France'—he stopped to add: 'And they dare to compare Hitler, that madman, with Napoleon, a true genius in every way'.

We had finished. The brandy bottle was empty; the air was thick with smoke; and Churchill asked me: 'What's the time?'

'Four o'clock, sir'.

'My God! I had an appointment with Beaverbrook at 3.30. Well, I shall go and get some sleep now'. He had got up, and saw me look at him with surprise. 'Don't you ever rest after lunch?'

'No, sir, never'.

'You ought to. You won't last my friend'. Before leaving by the door at the far end of the room, he turned to say: 'Have a good look again at my script. See my secretary, who always types my scripts for broadcasting. She'll tell you how to prepare it. And come and see me in the office upstairs at six o'clock'.

I objected that I was expected back at the B.B.C. and that they wanted to know how long the speech would take. 'Ring them up, they'll manage, you can't go back. And I've got to rehearse it with you; we'll have dinner together'. He vanished.

Typed Like a Poem

I finished the last corrections and then took my manuscript to the specially trained secretary. She showed me copies of Churchill's other scripts, which were typed to look like poems in free verse. The arrangement was actually to indicate the pauses for taking breath so as to be able to obtain the desired rhythm and emphasis. The lengths of the paragraphs and the intervals between them also varied according to the meaning of the sentences and the effect to be produced. It was also typed on a machine with exceptionally large letters. I then cut my script up into lines which showed the required rhythms and pauses.

At 4.30 the black-out curtains were drawn, and at six o'clock exactly the air raid started as it had done ever since the beginning of September. It served as my cue, and I knocked on the door of the room adjoining the secretaries' office. Churchill was standing in front of a fireplace in which a coal fire was burning. He was having a conversation with a British general and he had his back to the door through which I had come. I was standing directly behind him when he said: 'Where is this froggy speech of mine?'

'Here it is, sir', I replied, as quick as lightning. He turned sharply round, smiled, and like a naughty child, repeated his: 'I beg your pardon', which I had already heard him say that day in several different ways.

At seven o'clock I went down again to the basement dining-room which for me was already a historic spot, and which has remained one since in my memory. A tall lean man of that truly English type which is the antithesis of the John Bull-Churchill type, was standing alone at the end of the room on the right. I just had time to see Churchill come in by the same door as before. He was wearing his siren suit of sky-blue plush, fastened up the middle with a copper zip but torn all down the left side. His face was rosy: it was obvious that the Prime Minister had just emerged from a bath. He looked a child's toy.

He said good evening to the tall man and introduced me to him: it was Mr. Margesson, shortly to be Secretary for War. We sat down to table, Margesson and Churchill with their backs to the walls and at right angles to each other, I facing my pupil. Churchill said almost at once: 'We must rehearse seriously, going through it three times at least. My French isn't at all good'. And he grew absorbed reading his script, making one or two changes while we ate our soup in silence.

The anti-aircraft did its stuff; the drone of the German raiders was of average loudness. Mary brought in some red wine: 'No wine for me, Mary, thank you. I'm speaking French tonight'.

The Rehearsal

We started to rehearse; I pulled Churchill up over a word: 'That's right', he said, 'you must stop me, but not too often. You are bound to fail if you try to make me speak perfect French. All that matters is that I should be easily understood. If I spoke perfect French they wouldn't like it so much'.

There was a touch of ferocity as he made this little joke, but all through the rehearsal he was as attentive and docile as a good child; he was indeed angelic, but with sudden fits of temper; the pronunciation of the French *r* was beyond him and he could not manage some of the pure vowels such as the *o*'s which in English he likes to exaggerate in a throaty way. He relished the flavour of some words as though he were tasting fruit.

I can remember nothing of the dinner or of what we did or did not eat. I can only remember Churchill, looking like a pale-blue bear, opposite me, half hidden by the sheets of paper he held in both hands, struggling with the difficulties of an impossible language.

'Coffee, please, but no brandy for me, Mary, thanks'. And he made a sign to indicate that we had a right to brandy, as we were able to talk a normal form of speech. We managed to go through the script twice. I had not been able to time his speech because of the constant interruptions. It was 8.20; there was a knock at the door, and a big, hefty fellow stood framed on the threshold. 'It's time, gentlemen', said the man, whose voice and manner were those of a police inspector from Scotland Yard.

'Good', said Churchill, glad to be set free, 'come along'. After putting on a grey-blue overcoat and an R.A.F. peaked cap, he waited for us at the front door. I believe he was also carrying a gas mask which was still the rule for everyone at that time.

With his hand on the door-knob, Churchill turned back towards us: 'Ready?', he cried, as though there were a regiment at his heels.

'Yes', we both replied.

'Come along, then', and we crossed Downing Street, running behind him; the anti-aircraft guns were firing from very close by and the shell bursts overhead were followed by the whistling of showers of falling splinters. Following Churchill, we ran through an archway into a courtyard. We went down perhaps three storeys and were suddenly blinded by brilliant lights. We had come into a well-ordered world of scientific marvels; a white corridor was

lit with recessed lamps; we might have been inside a submarine. We were in Defence Headquarters, called 'The Annexe' in Churchill's memoirs. It was one of the nerve-centres of the free world.

At the end of the corridor we entered a T-shaped room. On the left, in the leg of the T, under a light frame of white wood, was a camp-bed, which once again made me think of Napoleon. On the right, in the top bar of the T, was a long table with microphones, round which technicians from the B.B.C. were busy. 'Have you got the timing?', one of them asked me.

I turned to Churchill who roared in answer: 'You must manage as best you can'.

He had already seated himself in the armchair facing the microphone, perfectly comfortable in his sky-blue siren suit. But I had to speak before he did. And I had to ask: 'Where can I sit, sir?'

He looked about him and seeing that there was no other chair in the room, he replied: 'On my knees'. And, leaning back in the armchair, he tapped his thigh. I inserted a leg between his and next moment had seated myself partly on the arm of the chair and partly on his knee.

'Silence, please', came the warning: then the green light. After the announcement '*Les Français parlent aux Français*', I began: 'It is a Frenchman speaking to you, but not for long. You already know that this evening, in a few minutes, the Prime Minister of

the United Kingdom, Mr. Winston Churchill, will speak to France. I am here only to tell you with what delight we learned that the Prime Minister was going to speak to you. He has chosen this period at 8.30 when *Les Français parlent aux Français*, and he has chosen wisely. Mr. Winston Churchill is an Englishman whom Frenchmen have no difficulty in understanding. What is the reason? He does not alarm them. They like his face and his manner; they like his humour, his frankness, his lively reactions, his forcible language and his colourful style. They express a rich nature and temperament.

In a few seconds you will hear Mr. Churchill's message. The Prime Minister will speak first in English, and afterwards in French. As the message is being broadcast by other services in the B.B.C. and relayed from the United States and Canada, there will be a delay of a few seconds before Mr. Churchill comes to the microphone'.

I slipped away quickly and silently.

Churchill delivered his message in English, then there was a pause, and after exclaiming 'Frenchmen', he prefaced the prepared text with the words: '*C'est moi, Churchill, qui parle avec vous*'. He then continued speaking without any trace of hurry.

After he had finished there was a prolonged silence. It was 9.15. Nobody moved. We were deeply stirred. Then Churchill stood up; his eyes were full of tears. 'We have made history tonight', he said.—*Home Service*

The Liberal Arts in the United States

By D. DAICHES RAPHAEL

A CENTURY ago, Thomas Gaisford is supposed to have said, in a Good Friday sermon at Oxford: 'The advantages of a classical education are two-fold. It enables us to look down with contempt on those who have not shared its advantages, and also fits us for places of emolument not only in this world, but in that which is to come'.

We have travelled a long way from that superb confidence. If the humanist today still retains any hope of emoluments in heaven, he knows too well that the big prizes on earth are not for him. Far from feeling contempt for others, he is liable to think himself its object. From time to time one hears distinguished scientists protesting that the attitude expressed by Gaisford is still prevalent; but I see little evidence of it. I doubt if there is much of it in Oxford today. And, in general, the university teacher in the humanities nowadays is not at all inclined to make large claims for himself. Beside the scientist, he feels like a poor relation, tolerated simply because it would not be decent to throw him out. The uses of science are manifest, its vistas

boundless. Any scientist worth his salt can contribute his mite to the store of human knowledge in research and to human comfort in the training of skilled men.

What can the humanist offer? The very word 'research' strikes a false note when applied to his work—unless it is itself of a scientific nature, as in philology. He has to take refuge in vague phrases like 'new insights' or 'interpretations'. The kind of

original work he can do is not a contribution to knowledge in any straightforward sense, and it is not at all obvious that it will make his pupils better at their future jobs, except in the case of those few who aim at becoming scholars themselves. In a scientific age, the humanist is beset by nagging doubts and dejection about the value of what he is doing.

I recently spent six months in the United States, and was interested to find a different attitude there. We tend to think of Americans as more pragmatic than ourselves, and one would therefore expect them to set even greater store by the useful sciences and less by the useless arts. They certainly do value science, and



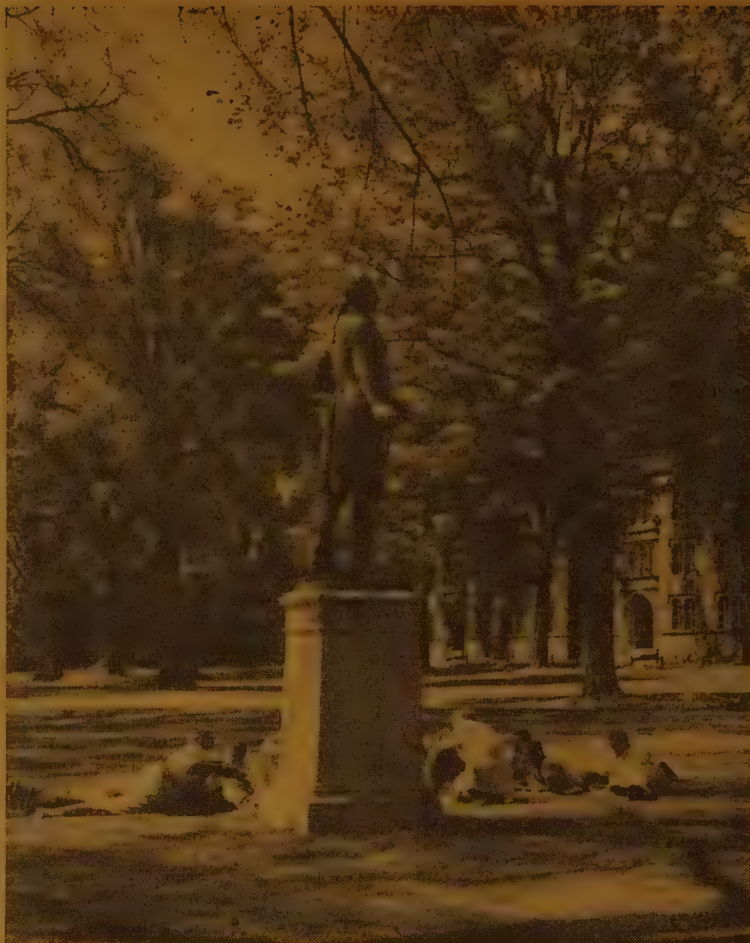
Students coming from a lecture in Benedict Hall, Hamilton College, New York State

make ample provision for it. But they also value the liberal arts to an extent that surprised me. For the larger part of my visit I was teaching at Hamilton College, a good example of the American Liberal Arts College. There is nothing in Britain that quite corresponds to this kind of institution. It gives a general education in the humanities and the sciences, taken by all students who go beyond the stage of high school. After their four years in the undergraduate college, many of them continue with further study of a professional or specialized nature. The would-be university teacher proceeds to a graduate school in his chosen field; the future lawyer or civil servant goes to a law school; the future doctor to a medical school; the engineer to an institute of technology. But all professional men and women have, in the first instance, the same kind of general education in 'liberal arts and sciences'. Of course, the future scientist, engineer, or doctor will commonly spend more of his time at the undergraduate college on scientific subjects than on the humanities; and the future lawyer or civil servant will reverse the emphasis. Nevertheless, they are all required to do something substantial on each side.

The result is that the gap between the humanities and the sciences, of which we are so conscious in this country, is less pronounced in America. I found that students 'majoring' in philosophy (my subject) really knew something of physics and mathematics; and students who were proposing to specialize in the sciences received not just a smattering but a fair grounding in philosophical ideas, as they did in literature and history.

What is more, the humanities are often given a certain amount of attention at the graduate or professional level of study in scientific and technical subjects. The leading institutes of technology have a strong programme of study in the humanities. I saw an example of this when I gave a lecture on a topic in aesthetics at the University of Southern California; the most interesting comments in the subsequent discussion were made by a man who, I learned later, taught philosophy at the California Institute of Technology. Medical schools are evidently now following the lead of the technologists. I met a man who was a Professor of Theology in New York but was about to take up a post in philosophy and theology at a large medical school in Chicago. Again, in Richmond, Virginia, I was asked to talk to research students of the medical school, and learned that they were setting up a regular programme of informal study and discussion in the humanities. Incidentally, I found that one of the students there was well versed in philosophy from his undergraduate studies. As a further example from a different field again, I learned at the University of Southern California that philosophy was being introduced into the curriculum of the graduate school of business administration there.

When I came across this kind of thing, I took the opportunity of discussing with my hosts the role of the humanities today, and referred to their uneasy position in Britain. I was told that the United States had passed through a similar phase some years ago, but there had now been a swing of the pendulum back to the traditional emphasis on the humanities, and everyone seemed certain that the reaction was a healthy one. For instance, I told



Students round the statue of Alexander Hamilton at Hamilton College

the medical men of an opinion I had heard expressed over here, that there was no need to worry about injecting the humanities into medical education because medical students were bound to find a humane element in their own training at the clinical stage, when they were dealing with human beings in hospitals. The Americans were sceptical about this—and I should add that they included men who had themselves had experience of post-graduate training in Oxford and London, so that their impressions were not drawn simply from the American scene. They agreed that in principle the constant contact with men, women, and children on beds of sickness ought to bring out human sympathy, but in practice it did not work out like that. To the clinical student, they said, the patient in the hospital is just another 'case'. I myself feel some scepticism about relying on humanistic studies to do what a real-life concern with human beings cannot do. But my American friends seemed confident enough. There was certainly no dejection or doubt about the value of the 'liberal arts'.

I dare say that the kind of value they are looking for is, in a general way, pragmatic. And the same is true of people in this country when they discuss the need, or lack of need, to 'humanize' doctors or engineers. The doctor who adds human sympathies and a sense of service to his scientific knowledge of health and disease is a better doctor; and the engineer who has some understanding of, say, political ideas, is, if not a better engineer, a better citizen. So far as citizenship goes, the Americans have, by tradition, a special task. A good deal of the American faith in general education for all probably rests on their old idea of welding diverse elements into one nation with a common culture.

What other sorts of value should be looked for? What is it that makes the liberal arts liberal, or the humanities humane? I suppose that their liberality is a matter of prising us out of mental grooves, widening our horizon beyond our limited experience and parochial ways of thinking, fostering the ability to initiate independent thought. But the sciences can have a similar liberalizing effect. That indeed is recognized by the typical American college with its title 'College of Liberal Arts and Sciences'.

Let us turn to the supposedly humane element of the humanities. This lies in a concern with the doings or products of human beings as self-conscious agents. The subject-matter of science is nature—including man, in the psychological or social sciences, but man as a natural phenomenon, his behaviour being treated as an object of impersonal observation. Study in the humanities is not the observation of what happens, and so it is not the acquisition of knowledge in the sense in which science is. It is rather an attempt to understand the intentional activities of human beings and the products of those activities. History seeks to understand men's actions. The study of literature and the other fine arts tries to give an intelligent appraisal and enjoyment of their creative products. Philosophy, which has a finger in all pies, deals with all intentional activities, including thinking itself as well as action proper and aesthetic expression. Because the primary study of what men do as agents is history, all the humanities are in some measure historical studies. When we think of the contribution science can and should make to liberal education,

the case is made most easily for the history of science, an account of science as a human activity, a vital part of human history.

The two things that stood out in the teaching of philosophy at Hamilton College were logic and the history of philosophy. The attention given to formal logic (an excellent course, by the way) is characteristic of American colleges and universities; I suspect that it goes along with American strength in the teaching of mathematics in the high schools. However, the star course in the philosophy department at Hamilton was the one in the history of philosophy. This is where the department makes its chief contribution to general education. And although the particular methods and content of this course at Hamilton College are not typical, I think the emphasis on history is.

There is a danger here: of detachment, of looking upon the history of thought as a passing show, instead of becoming involved in the problems. The danger is particularly strong when the whole of Western philosophy is covered, instead of concentrating on a few important thinkers, as we tend to do here, though this too has its fault in leaving serious gaps. The American system of general education, taken by and large, does tend to have the advantage of breadth and the disadvantage of relative superficiality, while

British university education scores with greater depth but runs the risk of narrow-minded specialism. The American student is given the depth later, at his graduate school, and by the time he has finished his studies there he is just as well qualified in his speciality as is the British scholar. But it takes longer to get there.

Some people will tell you that we do in the schools what the Americans do in the undergraduate college. My own experience at Hamilton College does not bear that out. The first year of the college curriculum is probably comparable with the work of the sixth form in a good English grammar school. But the whole of the four-year programme is more aptly compared with a pass or general degree course at a British university; and in fact I found that a number of the more senior students turned out work which would be regarded as highly creditable in honours students over here. This would probably not be true of all colleges, but in the best examples the American Liberal Arts College is far better than we are apt to suppose. I think we can learn from the Americans. Too many academics in this country say that general education in the liberal arts should be left to the schools. If they knew something of the American college at its best, they would change their minds.—*Third Programme*

What is Cosmic Dust?

By ROBERT WILSON

IT is rather a strange fact that we know more about the structure of other galaxies, such as the great nebula in Andromeda, than we do about our own star-system. This is owing to dark, obscuring matter in the plane of the Milky Way which prevents us from seeing all but a portion of our own lens-shaped galaxy. This obscuration not only restricts our view, it also impairs our judgment. A star may appear faint either because it is extremely distant or because it is heavily obscured. As the determination of distance is of fundamental importance in astronomy, it is essential to understand this obscuration before a reliable distance can be assigned to any star.

The obscuration is caused by small particles—dust, in fact.

But only a small fraction of the interstellar matter is in this form. Most of it is gas, principally hydrogen, which is virtually transparent. Small particles—solid or liquid—can be extremely efficient blockers of radiation. Suppose we are given half a cubic inch of water. We can subdivide this into as many droplets as we wish, and place them in the beam of the 100-inch telescope. What would be the effect observed by the telescope? As a single drop, the water would be impossible to detect, even with present-day photoelectric techniques. Only when we had broken it down into 1,000,000 droplets, each of one-hundredth of an inch diameter, would the stars begin to fade appreciably. But if we now subdivide the

drops further until their size is the same order as the wave-length of visible light, we would effectively block the view of the telescope and have conditions similar to a cloudy night. Continuing this process, the view would begin to clear again until, when the water was broken down into its constituent molecules, the obscuration would again be undetectable.

Obscuration is greatest when the size of the particles is of the same order as the wave-length of the observed radiation. This explains one of the advantages of radio astronomy. Since the cosmic-dust particles are very much smaller than radio wave-lengths, their blocking effect is negligible and radio waves can penetrate to the far reaches of the galaxy. This is also why radar penetrates the cloud and mist in our own atmosphere.

The cosmic dust does not obscure light of all wave-lengths equally, but is more effective in blocking blue light than red light. This causes distant stars to appear much redder than they actually are. The stars are said to be space-reddened. In the same way atmospheric dust causes the sun to appear red at sunset.

Careful measures of how the obscuration varies with wave-length can give us information about the cosmic grains. Two theoretical interpretations of these measures have been made. In 1948 the Dutch astronomer van de Hulst suggested that the particles were made of a non-conducting or transparent material. In this theory the average



Spiral nebula in Coma Berenices, seen edge on. The dark markings in its central plane are caused by cosmic dust

Mount Wilson and Palomar Observatories

particle size is about thirty-millionths of an inch—the wavelength of infra-red radiation. A rival theory, developed by the German scientist Güttler, required the particles to be metallic and much smaller in size. The controversy has been resolved by considering the way in which the light is lost in each case. Transparent particles obscure starlight by scattering it out of its original direction. Metallic particles scatter some radiation, but a large portion is absorbed within the particles themselves. Recent observations of the scattered light, which is seen as a diffuse background in the Milky Way, confirm that the particles are transparent.

There must be a very low density of particles, about 1,000 particles per cubic mile—that is roughly one particle per cubic furlong. This, however, is an average value, and the cosmic dust is not spread uniformly through space but, together with the interstellar gas, is formed into large clouds with a density about ten times the average. Each interstellar cloud contains enough material to make about 400 stars like the sun.

Until 1949 the cosmic dust had been regarded by astronomers as nothing more than a nuisance. But in that year a completely unexpected observation changed this view. Two American astronomers, Hall and Hiltner, while testing a theory concerned with the emission of radiation from stellar atmospheres, discovered independently that the light from distant stars was not only reddened but was also partially plane-polarized; that is, the vibrations of the light waves showed a preference for a particular direction. This discovery was of great importance. In the first place, it meant that the cosmic-dust particles could not be spherical, as was thought hitherto. The particles are probably in the form of long needles, which have the property of obscuring light waves vibrating in a plane parallel to their long axes more efficiently than vibrations in a plane perpendicular to this. Moreover, for a net polarization to be observed from the earth, the needles will have to act in unison: that is, they must be aligned in space with their axes parallel to each other. The polarization observations show a definite relation to the structure of the galaxy. In general, the plane of polarization lies in the plane of the Milky Way, and this requires the cosmic needles to be arranged with their long axes perpendicular to the plane of the galaxy.

The question immediately posed is: What is the nature of the large-scale force which aligns the cosmic needles in this fashion? The answer undoubtedly seems to be a magnetic field which must be of galactic proportions. In other words, the galaxy—like the Earth—has its own general magnetic field. But how can a magnetic field orient the cosmic needles, which are made of a material that, at best, can be only weakly magnetic? Two solutions of this problem have been suggested. Spitzer and Tukey, at Princeton, used the well-known picture of iron filings lined up in the field of a bar magnet. They proposed that each grain, although mainly non-magnetic, contains a small metallic impurity which forms itself into a highly magnetic nucleus. The cosmic needle is then oriented with its long axis parallel to the field. The magnetic field must be in a direction perpendicular to the galactic plane, if this theory is correct.

The other theory was developed by Davis and Greenstein of the Californian Institute of Technology. Their explanation does not require the grains to have magnetic cores. Davis and Greenstein pointed out that the particles would be bombarded by the molecules of the interstellar gas and that this would cause them to spin about their short axes. In the presence of a magnetic field these weakly magnetic, spinning needles tend to line up with their spin axis parallel to the magnetic field. If one imagines a wheel revolving about an axle, then the spokes of the wheel represent the rotating cosmic needles and the axle represents the direction of the magnetic lines of force. The strength of the field required to explain the observed

polarization is about ten-millionths of the earth's magnetic field.

Suppose the direction of the field is in the plane of the galaxy, along the axes of the spiral arms which are such a significant feature of many galaxies, including our own. When observing the Milky Way, we generally look across the spiral arms and therefore see the rotating needles edge on and observe maximum polarization. However, if we look in the direction of the constellation of Cygnus we are looking almost parallel to the axis of the local spiral arm. We should therefore see the rotating needles face on, and there should be no net alignment and therefore no net polarization. This indeed is what is observed, and as this observation cannot be explained by Spitzer and Tukey, their theory has been discarded. We now believe the magnetic field runs along the spiral arms.

In recent years evidence from observations of the dust has increased our knowledge of the galactic magnetic field, which confines the interstellar material within the spiral arms. Spiral structure, interstellar material and magnetic field are intimately connected; elliptical galaxies, with no spiral structure, are apparently without dust and gas. We have also discovered that the galactic field shows some waviness—it is not uniform—and

this led the great physicist Fermi to suggest that cosmic-ray particles are accelerated by these magnetic waves. But, despite our knowledge, we still do not know how the magnetic field was formed in the history of our galaxy.

We have now established the size and shape of the cosmic-dust particles and the fact that they are made of a transparent substance. This is no mean feat of scientific detection, for these tiny particles are very distant. We

have one problem left. We do not yet know their exact chemical composition; but we do know the composition of the interstellar gas, since we can observe its spectrum in the neighbourhood of very hot stars which cause it to fluoresce. Its composition is similar to that of the sun's atmosphere: mostly hydrogen, then helium, some carbon, nitrogen and oxygen, and a few metals. The distribution of the sizes of the particles suggests that they were formed by condensation from the interstellar gas, so it may be possible to get some clue on their composition by considering the condensation process. This process is controlled by the tendency of the condensed molecules to evaporate: thus helium, which is extremely volatile, is probably not present in the particles, and, to a lesser extent, this also applies to hydrogen. However, if we now make the assumption that the condensed atoms can combine to form more stable molecules, the calculations show that the most probable constitution is ice, with some methane and ammonia. These are all compounds of hydrogen. Because of our ignorance of the whole process, however, I am afraid that this argument is rather weak.

In addition to the observations of reddening and polarization, broad bands of absorption have been discovered in the spectra of distant stars. It looks as if these features are caused by the dust; so they represent, potentially, one of the best sources of information concerning the physics and chemistry of the grains. Unfortunately, it has so far proved impossible to identify them, and this is a fascinating problem for the astrophysicist. Identification means we must set up a similar material in the laboratory and reproduce the absorption features. This may well prove extremely difficult. But it is the last outstanding problem in the study of cosmic dust, and its eventual solution may well prove as fruitful as the discovery of polarization.—*Network Three*

Blackie and Son have celebrated 150 years of publishing by issuing a beautifully printed and illustrated short history of the firm by Agnes A. C. Blackie. It will interest all who follow the fortunes of 'family firms' in general and publishers in particular. For many years Blackie's have specialized in educational and children's books: among their most popular authors were G. A. Henty and Angela Brazil.



Diagram illustrating the polarization of the cosmic grains in relation to the earth's position in the galaxy

The Future of Man

The last of six Reith Lectures by P. B. MEDAWAR

IN this last lecture, I shall discuss the origin in human beings of a new, a non-genetical, system of heredity and evolution based upon certain properties and activities of the brain. The existence of this non-genetical system of heredity is something you are perfectly well aware of. It was not biologists who first revealed to an incredulous world that human beings have brains; that having brains makes a lot of difference; and that a man may influence posterity by other than genetic means. Yet much of what I have read in the writings of biologists seems to say no more than this. I feel a biologist should contribute something towards our *understanding* of the distant origins of human tradition and behaviour, and this is what I shall now attempt. The attempt must be based upon hard thinking, as opposed to soft thinking; I mean, it must be thinking that covers ground and is based upon particulars, as opposed to that which finds its outlet in the mopings or exaltations of poetistic prose.

Juke-box and Gramophone

It will make my argument clearer if I build it upon an analogy. I should like you to consider an important difference between a juke-box and a gramophone—or, if you like, between a barrel-organ and a tape-recorder. A juke-box is an instrument which contains one or more gramophone records, one of which will play whatever is recorded upon it if a particular button is pressed. The act of pressing the button I shall describe as the 'stimulus'. The stimulus is specific: to each button there corresponds one record, and *vice versa*, so that there is a one-to-one relationship between stimulus and response. By pressing a button—any button—I am, in a sense, instructing the juke-box to play music; by pressing this button and not that, I am instructing it to play one piece of music and not another. But—I am not giving the juke-box *musical* instructions. The musical instructions are inscribed upon records that are part of the juke-box, not part of its environment: what a juke-box or barrel-organ can play on any one occasion depends upon structural or inbuilt properties of its own. I shall follow Professor Joshua Lederberg in using the word 'elective' to describe the relationship between what the juke-box plays and the stimulus that impinges upon it from the outside world.

Now contrast this with a gramophone or any other reproducing apparatus. I have a gramophone, and one or more records somewhere in the environment outside it. To hear a particular piece of music, I go through certain motions with switches, and put a gramophone record on. As with the juke-box I am, in a sense, instructing the gramophone to play music, and a particular piece of music. But I am doing more than that: I am giving it musical instructions, inscribed in the grooves of the record I made it play. The gramophone itself contains no source of musical information; it is the record that contains the information, but the record reached the gramophone from the outside world. My relationship to the gramophone—again following Lederberg—I shall describe as 'instructive'; for, in a sense, I *taught* it what to play. With the juke-box, then—and the same goes for a musical-box or barrel-organ—the musical instructions are part of the system that responds to stimuli, and the stimuli are elective: they draw upon the inbuilt capabilities of the instrument. With a gramophone, and still more obviously with a tape recorder, the stimuli are instructive: they endow it with musical capabilities; they import into it musical information from the world outside.

It is we ourselves who have made juke-boxes and gramophones, and who decide what, if anything, they are to play. These facts are irrelevant to the analogy I have in mind, and can be forgotten from now on. Consider only the organism on the one hand—juke-box or gramophone; and, on the other hand, stimuli which impinge upon that organism from the world about it.

During the past ten years, biologists have come to realize that, by and large, organisms are very much more like juke-boxes than

gramophones. Most of the reactions of organisms which we were formerly content to regard as instructive are in fact elective. The instructions an organism contains are not musical instructions inscribed in the grooves of a gramophone record, but *genetical* instructions embodied in chromosomes and nucleic acids. Let me give examples of what I mean.

The Lamarckian Theory

The oldest example, and the most familiar, concerns the change that comes over a population of organisms when it undergoes an evolution. How should we classify the environmental stimuli that cause organisms to evolve? The Lamarckian theory, the theory that acquired characters can be inherited, is, in its most general form, an *instructive* theory of evolution. It declares that the environment can somehow issue genetical instructions to living organisms—instructions which, duly assimilated, can be passed on from one generation to the next. The blacksmith who is usually called upon to testify on these occasions gets mightily strong arms from forging; somehow this affects the cells that manufacture his spermatozoa, so that his children start life specially well able to develop strong arms. I have no time to explain our tremendous psychological inducement to believe in an instructive or Lamarckian theory of evolution, though in a somewhat more sophisticated form than this. I shall only say that every analysis of what has appeared to be a Lamarckian style of heredity has shown it to be *non-Lamarckian*. So far as we know, the relationship between organism and environment in the evolutionary process is an elective relationship. The environment does *not* imprint genetical instructions upon living things.

Another example: bacteriologists have known for years that if bacteria are forced to live upon some new and unfamiliar kind of foodstuff or are exposed to the action of an antibacterial drug, they acquire the ability to make use of that new food, or to make the drug harmless to them by breaking it down. The treatment was at one time referred to as the *training* of bacteria—with the clear implication that the new food or drug *taught* the bacteria to manufacture the new ferments upon which their new behaviour depends. But it turns out that the process of training belies its name; it is not instructive. A bacterium can synthesize only those ferments which it is genetically entitled to synthesize. The process of training merely brings out or exploits or develops an innate potentiality of the bacterial population, a potentiality underwritten or subsidized by the particular genetic make-up of one or another of its members.

When Animals Develop

The same argument probably applies to what goes on when animals develop. At one time there was great argument between 'preformationists' and those who believed in epigenesis. The preformationists declared that all development was an unfolding of something already there; the older extremists, whom we now laugh at, believed that a sperm was simply a miniature man. The doctrine of epigenesis, in an equally extreme form, declared that all organisms begin in a homogeneous state, with no apparent or actual structure; and that the embryo is moulded into its adult form solely by stimuli impinging upon it from outside. The truth lies somewhere between these two extreme conceptions. The genetic instructions are preformed, in the sense that they are already there, but their fulfilment is epigenetic—an interpretation that comes close to an elective theory of embryonic development. The environment brings out potentialities present in the embryo in a way which (as with the buttons on a juke-box) is exact and discriminating and specific but it does not *instruct* the developing embryo in the manufacture of its particular ferments or proteins or whatever else it is made of. Those instructions are

already embodied in the embryo: the environment causes them to be carried out.

Until a year or two ago we all felt sure that *one* kind of behaviour indulged in by higher organisms did indeed depend upon the environment as a teacher or instructor. The entry or injection of a foreign substance into the tissues of an animal brings about an immunological reaction. The organism manufactures a specific protein, an 'antibody', which reacts upon the foreign substance, often in such a way as to prevent its doing harm. The formation of antibodies has a great deal to do with resistance to infectious disease. The relationship between a foreign substance and the particular antibody it evokes is exquisitely discriminating and specific; one human being can manufacture hundreds—conceivably thousands—of distinguishable antibodies, even against substances which have only recently been invented, like some of the synthetic chemicals used in industry or in the home. Is the reaction instructive or elective?—surely, we all felt, instructive. The organism learns from the chemical pattern of the invading substance just how a particular antibody should be assembled in an appropriate and distinctive way. Self-evident though this interpretation seems, many students of the matter are beginning to doubt it. They hold that the process of forming antibodies is probably elective in character. The information which directs the synthesis of particular antibodies is part of the inbuilt genetical information of the cells that make them; the intruding foreign substance exploits that information and brings it out. It is the juke-box over again. I believe this theory is somewhere near the right one, though I do not accept some of the special constructions that have been put upon it.

Genetical Instructions

So in spite of all will to believe otherwise, and for all that it seems to go against common sense, the picture we are forming of the organism is a juke-box picture—a juke-box containing genetical instructions inscribed upon chromosomes and nucleic acids in much the same kind of way as musical instructions are inscribed upon gramophone records. But what a triumph it would be if an organism could accept information from the environment—if the environment could be made to act in an instructive, not merely an elective, way! A few hundred million years ago a knowing visitor from another universe might have said: 'It's a splendid idea, and I see the point of it perfectly: it would solve—or could solve—the problems of adaptation, and make it possible for organisms to evolve in a much more efficient way than by natural selection. But it's far too difficult: it simply can't be done'.

But you know that it has been done, and that there is just one organ which can accept instruction from the environment: the brain. We know very little about it, but that in itself is evidence of how immensely complicated it is. The evolution of a brain was a feat of fantastic difficulty—the most spectacular enterprise since the origin of life itself. Yet the brain began, I suppose, as a device for responding to elective stimuli. *Instinctive* behaviour is behaviour in which the environment acts electively. If male sex hormones are deliberately injected into a hen, the hen will start behaving in male-like ways. The potentiality for behaving in a male-like manner must therefore have been present in the female; and by pressing (or, as students of behaviour usually say, releasing) the right button the environment can bring it out. But the higher parts of the brain respond to instructive stimuli: we *learn*.

Now let me take the argument forward. It was a splendid idea to evolve into the possession of an organ that can respond to instructive stimuli, but the idea does not go far enough. If that were the whole story, we human beings might indeed live more successfully than other animals; but when we died, a new generation would have to start again from scratch. Let us go back for a moment to genetical instructions. A child at conception receives certain genetical instructions from its parents about how its growth and development are to proceed. Among these instructions there must be some which provide for the issue of further instructions; I mean, a child grows up in such a way that it, too, can eventually have children, and convey genetical instructions to them in turn. We are dealing here with a very special system

of communication: a *hereditary* system. There are many examples of systems of this kind. A chain letter is perhaps the simplest: we receive a letter from a correspondent who asks us to write to a third party, asking him in turn to write a letter of the same kind to a fourth, and so on—a hereditary system. The most complicated example is provided by the human brain itself; for it does indeed act as intermediary in a hereditary system of its own. We do more than learn: we teach and hand on; tradition accumulates; we record information and wisdom in books.

Four Stages in the Brain's Evolution

Just as a hereditary system is a special kind of system of communication—one in which the instructions provide for the issue of further instructions—so there is a specially important kind of hereditary system: one in which the instructions passed on from one individual to another change in some systematic way in the course of time. A hereditary system with this property may be said to be conducting or undergoing an *evolution*. Genetic systems of heredity often transact evolutionary changes; so also does the hereditary system that is mediated through the brain. I think it is most important to distinguish between four stages in the evolution of a brain. The nervous system began, perhaps, as an organ which responded only to elective stimuli from the environment; the animal that possessed it reacted instinctively or by rote, if at all. There then arose a brain which could begin to accept instructive stimuli from the outside world; the brain in this sense has dim and hesitant beginnings going far back in geological time. The third stage, entirely distinguishable, was the evolution of a non-genetical system of heredity, founded upon the fact that the most complicated brains can do more than merely receive instructions; in one way or another they make it possible for the instructions to be handed on. The existence of this system of heredity—of tradition, in its most general sense—is a defining characteristic of human beings, and it has been important for, perhaps, 500,000 years. In the fourth stage, not clearly distinguishable from the third, there came about a systematic change in the nature of the instructions passed on from generation to generation—an evolution, therefore, and one which has been going at a great pace in the past 200 years. I shall borrow two words used for a slightly different purpose by the great demographer Alfred Lotka to distinguish between the two systems of heredity enjoyed by man: *endosomatic* or internal heredity for the ordinary or genetical heredity we have in common with other animals; and *exosomatic* or external heredity for the non-genetic heredity that is peculiarly our own—the heredity that is mediated through tradition, by which I mean the transfer of information through non-genetic channels from one generation to the next.

I am, of course, saying something utterly obvious: society changes; we pass on knowledge and skills and understanding from one person to another and from one generation to the next; a man can indeed influence posterity by other than genetic means. But I wanted to put the matter in a way which shows that we must not distinguish a strictly biological evolution from a social, cultural, or technological evolution: *both* are biological evolutions: the distinction between them is that the one is genetical and the other is not.

Almost No Lessons to be Learned

What, then, is to be inferred from all this? What lessons are to be learned from the similarities and correspondences between the two systems of biological heredity possessed by human beings? The answer is important, and I shall now try to justify it: the answer, I believe, is almost none.

It is true that a number of amusing (but in one respect highly dangerous) parallels can be drawn between our two forms of heredity and evolution. Just as biologists speak in a kind of shorthand about the 'evolution' of hearts or ears or legs—it is too clumsy and long-winded to say every time that these organs participate in evolution or are outward expressions of the course of evolution—so we can speak of the evolution of bicycles or wireless sets or aircraft with the same qualification in mind: they do not really evolve, but they are appendages, exosomatic organs if you like, that evolve with us. And there are many correspondences between the two kinds of evolution. Both are gradual if we take

the long view; but on closer inspection we shall find that novelties arise, not everywhere simultaneously—pneumatic tyres did not suddenly appear in the whole population of bicycles—but in a few members of the population; and if these novelties confer economic fitness, or fitness in some more ordinary and obvious sense, then the objects that possess them will spread through the population as a whole and become the prevailing types. In both styles of evolution we can witness an adaptive diversification, a deployment into different environments: there are wireless sets not only for the home, but for use in motor-cars or for carrying about. Some great dynasties die out—airships, for example, in common with the dinosaurs they were so often likened to; others become fixed and stable: toothbrushes retained the same design and constitution for more than a hundred years. And, no matter what the cause of it, we can see in our exosomatic appendages something equivalent to vestigial organs; how else should we describe those functionless buttons on the cuffs of men's coats?

All this sounds harmless enough: why should I have called it dangerous? The danger is that by calling attention to the similarities, which are not profound, we may forget the *differences* between our two styles of heredity and evolution; and the differences between them are indeed profound. In their hunger for synthesis and systematization, the evolutionary philosophers of the nineteenth century and some of their modern counterparts have missed the point: they thought that great lessons were to be learnt from similarities between Darwinian and social evolution; but surely it is from the differences that all the great lessons are to be learnt. For one thing, our newer style of evolution is Lamarckian in nature. The environment cannot imprint genetical information upon us, but it can and does imprint non-genetical information which we can and do pass on. Acquired characters are indeed inherited. The blacksmith was under an illusion if he supposed that his habits of life could impress themselves upon the genetic make-up of his children; but there is no doubting his ability to teach his children his trade, so that they can grow up to be as stalwart and skilful as himself. It is because this newer evolution is so obviously Lamarckian in character that we are under psychological pressure to believe that genetical evolution must be so too. But although one or two biologists are still feebly trying to graft a Lamarckian or instructive interpretation upon ordinary genetical evolution, they are not nearly so foolish or dangerous as those who have attempted to graft a Darwinian or purely elective interpretation upon the newer, non-genetical, evolution of mankind.

A Liberating Conception

The conception I have just outlined is, I think, a liberating conception. It means that we can jettison all reasoning based upon the idea that changes in society happen in the style and under the pressures of ordinary genetic evolution; abandon any idea that the direction of social change is governed by laws other than laws which have at some time been the subject of human decisions or acts of mind. That competition between one man and another is a necessary part of the texture of society; that societies are organisms which grow and must inevitably die; that division of labour within a society is akin to what we can see in colonies of insects; that the laws of genetics have an overriding authority; that social evolution has a direction forcibly imposed upon it by agencies beyond man's control—all these are biological judgments; but, I do assure you, bad judgments based upon a bad biology. In these lectures you will have noticed that I advocate a 'humane' solution of the problems of eugenics, particularly of the problems of those who have been handicapped by one or another manifestation of the ineptitude of nature. I have not claimed, and do not now claim, that humaneness is an attitude of mind enforced or authorized by some deep inner law of exosomatic heredity: there are technical reasons for supposing that no such laws can exist. I am not warning you against quack biology in order to set myself up as a rival pedlar of patent medicines. What I do say is that our policies and intentions are not to be based upon the supposition that nature knows best; that we are at the mercy of natural laws, and flout them at our peril.

It is a profound truth—realized in the nineteenth century by only a handful of astute biologists and by philosophers hardly at all (indeed, most of those who held any views on the matter held a contrary opinion)—a profound truth that nature does *not*

know best; that genetical evolution, if we choose to look at it liverishly instead of with fatuous good humour, is a story of waste, makeshift, compromise, and blunder.

Essential Reactions

I could give a dozen illustrations of this judgment, but shall content myself with one. You will remember my referring to the immunological defences of the body, the reactions that are set in train by the invasion of the tissues by foreign substances. Reactions of this kind are more than important: they are essential. We can be sure of this because some unfortunate children almost completely lack the biochemical aptitude for making antibodies, the defensive substances upon which so much of resistance to infectious disease depends. Until a few years ago these children died, because only antibiotics like penicillin can keep them alive; for that reason, and because the chemical methods of identifying it have only recently been discovered, the disease I am referring to was only recognized in 1952. The existence of this disease confirms us in our belief that the immunological defences are vitally important; but this does not mean that they are wonders of adaptation, as they are so often supposed to be. Our immunological defences are also an important source of injury, even of mortal injury.

For example: vertebrate animals evolved into the possession of immunological defences long before the coming of mammals. Mammals are viviparous: the young are nourished for some time within the body of the mother: and this (in some ways) admirable device raised for the first time in evolution the possibility that a mother might react immunologically upon her unborn children—might treat them as foreign bodies or as foreign grafts. The haemolytic disease that occurs in about one newborn child in 150 is an error of judgment of just this kind: it is, in effect, an immunological repudiation by the mother of her unborn child. Thus the existence of immunological reactions has not been fully reconciled with viviparity; and this is a blunder—the kind of blunder which, in human affairs, calls forth a question in the House or even a strongly worded letter to *The Times*.

But this is only a fraction of the tale of woe. Anaphylactic shock, allergy, and hypersensitivity are all aberrations or mis-carriages of the immunological process. Some infectious diseases are dangerous to us not because the body fails to defend itself against them but—paradoxically—because it does defend itself: in a sense, the remedy is the disease. And within the past few years a new class of diseases has been identified, diseases which have it in common that the body can sometimes react upon its own constituents as if they were foreign to itself. Some diseases of the thyroid gland and some inflammatory diseases of nervous tissue belong to this category; rheumatoid arthritis, lupus erythematosus, and scleroderma may conceivably do so too. I say nothing about the accidents that used to occur in blood transfusions, immunological accidents; nor about the barriers, immunological barriers, that prevent our grafting skin from one person to another, useful though it would so often be; for transfusion and grafting are artificial processes, and, as I said in an earlier lecture, natural evolution cannot be reproached for failing to foresee what human beings might get up to. All I am concerned to show is that natural devices and dispositions are highly fallible. The immunological defences are dedicated to the proposition that anything foreign must be harmful; and this formula is ground out in a totally indiscriminating fashion with results that are sometimes irritating, sometimes harmful, and sometimes mortally harmful. It is far better to have immunological defences than not to have them; but this does not mean that we are to marvel at them as evidences of a high and wise design.

Improving upon Nature

We can, then, improve upon nature; but the possibility of our doing so depends, very obviously, upon our continuing to explore into nature and to enlarge our knowledge and understanding of what is going on. If I were to argue the scientists' case, the case that exploration is a wise and sensible thing to do, I should try to convince you of it by particular reasoning and particular examples, each one of which could be discussed and weighed up;

(continued on page 1118)

B.B.C. NEWS HEADLINES

December 16—21

Wednesday, December 16

The Prime Minister announces the setting up of a Royal Commission on the police, under the chairmanship of Sir Henry Willink

At the meeting of the Nato ministerial council in Paris, General Norstad, Supreme Commander, says that he cannot carry out his defence plans unless European air defence is unified

The trawler 'Red Falcon' is lost with her crew of nineteen in a gale off the west coast of Scotland

Thursday, December 17

The Nato Ministers adopt the suggestion of Mr. Herter, U.S. Secretary of State, for long-term planning of policy

The Colonial Secretary arrives in Tanganyika during his tour of East Africa

It is announced that the Queen's third child, expected in the New Year, will be born at Buckingham Palace

Friday, December 18

President Eisenhower and Mr. Macmillan arrive in Paris for tomorrow's four-Power meeting

Mr. Chou En-lai, in a letter to Mr. Nehru, offers to meet him on December 26 to discuss the dispute over the frontier

The Agricultural Wages Board agrees to increase the wages of farm workers in England and Wales by four shillings a week and to reduce their hours from forty-seven to forty-six

Saturday, December 19

The four Western leaders meet in Paris

The United Kingdom Atomic Energy Authority carries out, in the Lake District, the first of a series of underground tests (using ordinary explosives) to supply information to the conference in Geneva on the detection of nuclear explosions

A Bill is published in Cyprus setting out arrangements for the first parliamentary elections

Sunday, December 20

The Western leaders send an invitation to Mr. Khrushchev to attend a series of 'summit' conferences, starting in Paris next April

Rioting breaks out between Africans and Asians in Nairobi

Renewed gales round the coast of Britain cause further disruption to shipping

Monday, December 21

The Western conference in Paris ends

President Eisenhower flies to Madrid and is welcomed by General Franco

Mr. Nehru tells parliament in Delhi that he has rejected Mr. Chou En-lai's invitation



The Netherlands: decorations spanning Nieuwendijk, one of the main shopping streets of Amsterdam



Germany: housewives preparing the Plätzchenbacken—cutting out and baking into decorative shapes biscuits which are eaten as part of the traditional fare of German families all over the country at Christmas

CHRIST



Sweden: left, children putting out food and countryside at Christmas time part of the tradition



Czechoslovakia: officials on the Bavarian-Czechoslovak Christmas tree that can be seen from beyond the Iron Curtain. In the background forest of Bohemia

AS IN EUROPE



of corn for the birds, a custom carried out in both town
the yule ram; models like these, made of straw, form
mas decorations in most Swedish homes



Norway: a brilliant line of Christmas trees illuminating the Torvalmenningen in Bergen



r stand
night
of the



Switzerland: preparing for Christmas at the international Pestalozzi children's village for war orphans at Trogen. The children, together with those in a similar 'village' at Sedlescombe in Sussex, will be seen on B.B.C. television in 'Peace on Earth' on Christmas morning

Italy: *left*, a small girl gazing at a display of dolls in a toyshop in Rome—in contrast to *(above, left)* one of the thousands of refugee children who are spending Christmas in camps in Europe and the Middle East: one of a series of photographs recently taken by Bob Collins during this World Refugee Year

(continued from page 1115)

some, perhaps, to be found faulty. I should not say: Man is driven onwards by an exploratory instinct, and can only fulfil himself and his destiny by the ceaseless quest for Truth. As a matter of fact, animals do have what might be loosely called an inquisitiveness, an exploratory instinct; but even if it were highly developed and extremely powerful, it would still not be binding upon us. We should not be driven to explore.

Contrariwise, if someone were to plead the virtues of an intellectually pastoral existence, not merely quiet but acquiescent, and with no more

than a pensive regret for not understanding what could have been understood; then I believe I could listen to his arguments and, if they were good ones, might even be convinced. But if he were to say that this course of action or inaction was the life that was authorized by Nature; that this was the life Nature provided for and intended us to lead; then I should tell him that he had no proper conception of Nature. People who brandish naturalistic principles at us are usually up to mischief. Think only of what we have suffered from a belief in the existence and overriding authority of a fighting instinct; from

the doctrines of racial superiority and the metaphysics of blood and soil; from the belief that warfare between men or classes of men or nations represents a fulfilment of historical laws. These are all excuses of one kind or another, and pretty thin excuses. The inference we can draw from an analytical study of the differences between ourselves and other animals is surely this: that the bells which toll for mankind are—most of them, anyway—like the bells on alpine cattle; they are attached to our own necks, and it must be *our* fault if they do not make a cheerful and harmonious sound.—*Home Service*

Bridge Forum

'Inter-Regional Quiz'—First Semi-Final

By HAROLD FRANKLIN and TERENCE REESE



IN THE FIRST semi-final of the inter-regional quiz, played on December 20 in Network Three, Liverpool, represented by Mr. A. C. Douglass and Mr. E. G. P. Martin, met Dewsbury, represented by Miss A. Armitage and Mr. G. P. Hirst. Both sides scored well in the first part of the 'quiz', when five questions were asked, relating to the following hand: Love all. You are South, the dealer.

♠ K Q 2 ♥ Q J 2 ♦ A Q J 10 2 ♣ K 4

You have opened One Diamond. What do you bid on the second round in the following five cases:

- (1) 1D—1S—No Bid—No Bid—?
- (2) 1D—2C—No Bid—No Bid—?
- (3) 1D—No Bid—1S—No Bid—?
- (4) 1D—1N.T.—2C—No Bid—?
- (5) 1D—No Bid—2H—No Bid—?

The answers were judged as follows:

(1) One No Trump. A consolation award was given to double. One No Trump, in this situation, shows a maximum No Trump, with opponent's suit held.

(2) Double. This would be an informatory double: the hand is clearly well suited to play in either major should partner have a five-card suit.

(3) Two No Trumps. The No Trump shape and the club holding make this bid a clear choice.

(4) The judges differed in their answers to this question. Franklin chose No Bid, and Reese Two No Trumps. Both answers were acceptable. Three of the four competitors chose No Bid; the fourth chose Three No Trumps and failed to score. The point to note is that partner advertises a weak hand when he fails to double One No Trump.

(5) Three Hearts. It is best to show support for partner's suit at the first opportunity.

Liverpool scored 17 points against 15 by their opponents, but Dewsbury, as in their first-round match, turned the tables in their bidding of the test hand: Love all; dealer West.

WEST	EAST
♠ A 10 4 3	♠ J 6 5 2
♥ A K J 8 4	♥ Q 7 3
♦ A 5	♦ 9 2
♣ 8 6	♣ A Q 7 4

Liverpool overshot the mark badly with the following auction:

WEST	EAST
1H	1S
3S	4S
4N.T.	5C
5S	6S

West trapped his partner with a completely inconsistent bid. Three Spades was a limit bid, which East might have passed: when East accepted the invitation to game he was pushed beyond game, so that in effect he was given the

choice between playing in Three Spades or Five Spades. The Dewsbury bidding was the same up to Four Spades, at which point West passed. Four Spades scored 7 out of 10, while Six Spades failed to score. Four Hearts would have scored the maximum 10: it was the view of both Reese and Franklin that East's best initial response would have been Two Hearts, on the principle that with a hand of limited strength including support for partner's suit it is best to show that support at once.

Both sides were asked to plan the play in a contract of Four Hearts against the opening lead of the King of Diamonds, and were given the helpful information that the outstanding trumps were 3—2. Clearly everything depends on how best to play the spade suit, and that in turn depends on how many tricks the suit has to yield. The declarer should establish this by an early club finesse. If the finesse fails he will need three spade tricks and can contrive this by playing one hand for K x or Q x. If, however, the club finesse succeeds he requires two spade tricks only: in that event the correct play is to lay down the ace and so guarantee two tricks against any possible distribution of the suit.

Both sides failed to find this rather advanced play, although Liverpool scored a consolation award of 2 points, leaving Dewsbury the winners by 22 points against 19.

CHRISTMAS BRIDGE PUZZLES

I—A Problem in Play

WEST	EAST
♠ A K Q J 5 4	♠ 10 8 7
♥ A K Q	♥ J 10 7 6 3
♦ A Q 9 4	♦ 6 2
♣ None	♣ K 7 3

West, who has bid spades and diamonds, is the declarer in Six Spades. North leads the three of spades on which the dummy plays the seven and South the two. Plan the play.

II—A Problem in Defence

Game All; dealer South

NORTH	EAST	SOUTH	WEST
1S	Double	3C	No
3H	No	4D	No
5C	Double	No	No
No			

Set by HAROLD FRANKLIN

(for solutions see page 1126)

West leads the nine of hearts. The North and East hands are:

NORTH	EAST
♠ A J 10 7 4	♠ K 6 2
♥ K Q 7 5 3	♥ A J 10 4
♦ 7	♦ K Q 5
♣ Q 4	♣ K 10 9

The Queen is played from the table: East wins with the Ace and South plays the two. What should East play next? Construct a probable hand for South.

III—A Problem in Double Dummy Play

NORTH	EAST
♠ 8 5 2	♠ K Q 7 4 3
♥ A K Q 10 7 4	♥ J 8 6 2
♦ None	♦ 7
♣ A 8 5 2	♣ K J 7

WEST	SOUTH
♠ 10 9	♠ A J 6
♥ 9	♥ 5 3
♦ 6 5 4 3 2	♦ A K Q J 10 9 8
♣ 10 9 6 4 3	♣ Q

South to make Seven No Trumps against the opening lead of the ten of spades.

F-I-R-E!

TEN THOUSAND TIMES A MILE



Did you know that when you're cruising along in your car the cylinders fire something like 10,000 times a mile?

It makes you think, doesn't it? . . . makes you realise how vital that this firing should take place as planned — in exactly the right spot and at exactly the right time. Full, smooth power depends on it.

In a new engine this happens naturally. But soon engine deposits start building up on cylinder walls and spark plugs and make your engine fire 'off beat'. Today's fine high-compression engines are the worst sufferers from this uncontrolled ignition which takes the edge off engine performance and wastes fuel.

Five years ago Shell introduced their now famous petrol additive — I.C.A. — which neutralises the deposits in running and so keeps engines smooth and powerful. I.C.A. has proved the complete answer to the problem and has been endorsed by the world's leading automotive authorities. With each rise in compression ratios, it grows increasingly important.

You hear a lot about Shell research and the big sums we spend on it. Here is a very good example of how this investment earns dividends for the everyday motorist.



YOU CAN BE SURE OF



A Master of Method

E. K. WATERHOUSE on the art historian, Bernard Berenson

IT is not taking a posthumous liberty to refer to Berenson as 'B.B.'. At some moment (I am not sure when, but it may not have been until after the last war) he became an international institution, and we have a habit of referring to institutions by their initials, whether we have anything personal to do with them or not. In B.B.'s case the initials had been used by his family and the close circle of his friends long before they became common form—and this suggests that, even to those nearest him, he had always seemed something of an institution.

I fancy this is true. Although he had a most vivid personality he did not, at any rate in later life, seem to belong precisely to any nationality or to any particular generation—least of all to the present. He evaded the tiresome issues of contemporary life, such as using the telephone or having small change about his person, and his faults were not those of the ordinary erring human being with which we are familiar. They were rather those of an early calculating machine which had come to be used as a pet by a later generation of scientists. This may throw some light on what he achieved for art history in his long and very useful life. For although, like all men who have done one thing extremely well, he liked to toy with the idea that he had really missed his vocation, I take it for granted that his 'value', at any rate before the bar of this world, is as an art historian. It can perhaps be estimated by considering what the situation for art history was when B.B. dramatically entered the arena in the earlier eighteen-nineties and what it is today—and how, and how much, it was he who has been responsible for the change.

One could make a case that his influence has only really been felt in his chosen field of Italian painting and Italian drawings of between about 1300 and the end of the sixteenth century. He certainly chose this field for himself, in a spirit of almost passionate dedication. He had looked at other fields first—he once told me he had begun with an interest in the Dutch; and he was never incurious about the art of other countries and other peoples, but he remained wonderfully silent about them in print: and Italian painting after 1600 never seriously appealed to him. He chose this field because he believed that it included the highest achievements in the field of art in the one tradition which alone seemed to him to enhance the value of life: the humanist tradition as it was inherited from the ancients by Renaissance Italy. He settled down to live near Florence in the very centre of this tradition, and he became what he describes in the preface to the 1932 edition of his *Lists*—'one who dedicates his whole life to art, and

not merely his week-ends, holidays and leisure moments'. Certainly his influence on Italian studies has been greatest: on the side of the heart they were what mattered to him: but, on the side of the head, what mattered most was method. It is for this reason that he has been such a powerful influence throughout the whole field of art history. His most memor-

That was written in 1926. It is not well written or finely written or even memorably written, but it is commendably lacking in that hypnotic wizardry which pervades the writing of Ruskin or Pater, who were the great insufflators of artistic interest in the English-reading world in the age in which B.B. grew up. He never wrote well, and I suspect he knew it, as he

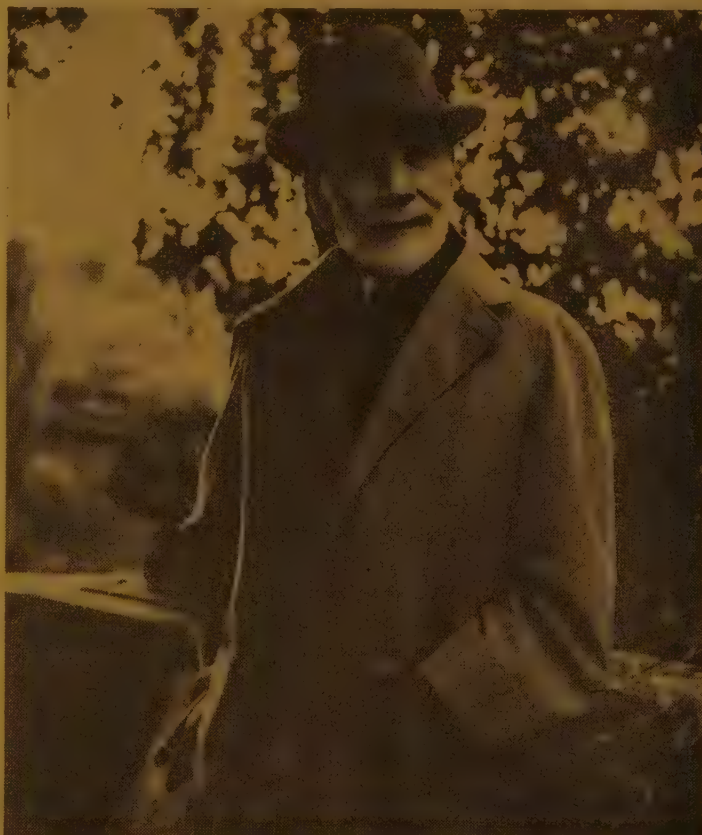
refers somewhere to his 'over-continentalized English': I suspect also that this deficiency is one of the reasons why he has been such a profound influence in training the minds of several generations of art historians. There is no field of study in which it would be truer to say that good writing was given to man to conceal his ideas. There is no temptation to read B.B. uncritically, as there was to read Ruskin or Pater uncritically, or as there still is today in the works of some of the most eloquent of the products of the studio of I Tatti, such as Geoffrey Scott or Sir Kenneth Clark.

In England, up to the nineteen-thirties, it was impossible to become a professional art historian through any available academic channels at home, and, for something like thirty years, B.B.'s works were the one great extramural correspondence course. It is certainly no accident that British scholars who grew up during that time have devoted so much of their best energies to work in the field of Italian studies in art history. I began to get B.B.'s works as school prizes when I was fifteen, and there are moments when I still doubt whether there is any better method of art history training than to devour, absorb, and, in part, reject the works of a profoundly stimulating mind like B.B.'s, especially of one like B.B. who has never minded making mistakes and then correcting them, and who has always been more concerned with stimulating others than in personal infallibility.

There is another passage worth quoting in that introduction to the 1932 *Lists*, which is one of the most revealing documents that he wrote:

It would have been easy to omit the pictures I have attributed with a question mark, casting them out from the garden like worthless weeds, and my reputation would perhaps have gained in certain circles if I had done so. But it seems more generous to expose oneself to the risk of disparagement than to fail to call attention to the most likely affiliations of uncertain pictures. Abstinence is safe but sterile.

That tells you why B.B. has always been the most healthy and fruitful of influences. He always minded so much more about the reputation of a work of art than about his own, and it is one of the most prevailing infirmities of art historians that they are so often entirely concerned with their own reputations.



Bernard Berenson (1865-1959)

Allan Chappelow

able volume of collected papers is significantly titled *Three Essays in Method*.

In the preface to that book he gives the clearest account of what he was up to in his writings:

My purpose is not to show off my own gifts, but to let students into my workshop. I want them to find there not a series of select exhibits, but a man at work. Now a man cannot work without shortcomings. That is left for automata: and automatism is not scholarship. Scholarship necessarily abounds in error. An advantage of the method pursued in these essays is that its errors are not only easily exposed and corrected, but cannot raise defence that does not render the defendant ridiculous. We are all liable to understatement; to overstatement, to misstatement, to temporary aberrations, to momentary amnesia. Even the most severely quantitative science adopts trial and error as its avowed method. When the error is pointed out by others, or discovered by ourselves the morning after, we have no thought but of correcting it. No appeal to authority, to intuition, to inspiration, to 'eye', to accumulated experience, counts against manifest fact.

It may well be that the greatest monument of B.B.'s scholarship is *The Drawings of the Florentine Painters*, but the living core of his work is certainly to be found in the famous lists, so often (but not often enough) varied and corrected and republished, and still in the course of another edition. In their first editions, the lists which appeared at the end of *Venetian Painters of the Renaissance* (1894), and *Florentine Painters* (1896), they were more or less acts of defiance. Two large exhibitions of Italian painting had been held in London just before the appearance of these books, in which the names of the greatest Italian masters had been used with old-fashioned recklessness. B.B.'s first lists were extremely exclusive: only pictures of the highest quality which showed the hand of the master right through were allowed into the canon, and the lists were based on the conviction 'that the hand of the artist never faltered'. They were the work of a young prophet. B.B.'s mission remained at this stage, with the lists attached at the end of four volumes of text, through several reprints, until 1932. In that year came out the Oxford one-volume edition of all four lists, on thin paper, and in size no bigger than a Baedeker. No doubt students will always have to refer to later editions—all, alas, much larger in bulk—but the 1932 lists will always be held the most in affection by those who like to travel and see their pictures in the original and not merely to pore over photographs. It really will

go into the pocket and it should be as essential a companion to the serious traveller in Italy (and in most other countries too) as the *Guides gastronomiques* are to travellers of another sort. I shall be surprised if, in fifty years, this 1932 edition is not still used on journeys by the sort of traveller one would like to meet abroad. The 1932 lists (and the same is true for the Italian 1936 edition) are no longer the personal message of a young prophet. They are a collated and approved statement by the head of the profession. (There is a great deal in detail in them with which each one of us would disagree, but this does not alter their general character.) They resume and comment on by implication the work of the vast number of scholars who had worked in the same field in the intervening thirty years. They include not merely the pure ore of the master's own works, but every picture which a serious student would have to consider when studying an artist—provided that at the time of publishing it had a more or less permanent home: a provision which leaves out of account a large number of pictures. Finally, there comes the last stage in the evolution of the lists of which only the Venetian School has so far been published—in 1957. In this all pictures (and by a very much larger number of painters) are included, provided it can be made clear which they are, either by the name of a past (and sometimes a remotely past) owner, or by an illustration if it is their fate to have been perennially

'homeless' (in a purely Berensonian sense). In a sense it is this last edition to which all B.B.'s work of a lifetime has been leading up—it is a sort of Linnaean treatment, a system, a *summa*, of the whole field of Italian painting of the great period. With a certain unreal modesty B.B. himself says: 'What meagre results for the task of a lifetime! Yes, had it been a task. But it has been a way of living'. One should remember that B.B.'s studies began when few pictures had been photographed and none scientifically examined. He is the great figure of the transitional phase in art history, and there is a risk that his work will be considered obsolete because it was done without the equipment of modern times. In fact it is an epitome of the values which must be taken over by the users of modern methods if they are not to lose half the value of their equipment. It is too easy to say that one can learn nothing from reading many of B.B.'s earlier (and some of his later) works. 'Learning', in this sense, is not everything that matters. If we are looking for the kind of value which Berenson has been and is likely to remain, we can ponder what Goethe said of Winckelmann towards the end of his life, in a conversation with Eckermann on February 16, 1827: 'He is like Columbus, when he had not yet discovered the new world, yet had a presentiment of it in his mind. We learn nothing by reading him, but we become something'.—*Third Programme*

Letters to the Editor

The Western Alliance and Russia
Sir,—The former United States Secretary of State, in his speech published in THE LISTENER of December 17, presents a carefully reasoned case in defence of nurturing and maintaining the present system of Western Defence, likening it to a tree whose roots ought not to be disturbed.
One feels reluctant to look back at two major wars which formed part of one's own experience, but in view of reports from Germany of the re-emergence into public life and positions of responsibility of those who lived and breathed Nazi ideology in the past, would it not be folly to forget?
What Khrushchev and Co. might do is one thing: what Krupp and Co. have done is still being lived out in terms of suffering throughout the length and breadth of the land.
Yours, etc.,
CLARA P. MELLOR

Sale
Sir,—May a mere layman be permitted to record here his great satisfaction with Dr. Simpson's talk in THE LISTENER of December 10? As a much-needed champion of Haydn's music he has always commanded my respect, and now his penetration into the unsatisfactory nature of modern theory-music must rank with Fürtwangler's notable exposure of atonality as semantically a sort of musical atheism.
To me, the most valuable part of this essay was the final discussion of why present-day pseudo-musicians manage all right with their

mathematics but hopelessly fall down where drama is the demand. Apparently it is not only students who find themselves out of their depth in development sections, or whose scherzos invariably peter out à la Mendelssohn. I believe that the solution lies in the hands of the imaginative type of critic. When musicologists of Mr. Stadlen's calibre and Tovey's humanitarian successors have brought to a climax their excellent work and pointed out just how much humanity and scholarship went into the classics, some composer may even be inspired to go and do likewise.
The impartial receptivity recommended at the beginning of Dr. Simpson's talk may be relevant in schools of composition. But as Fürtwangler saw, the negativeness of atonal music may also provide the ethically minded listener with visions—visions, however, which are too disconcerting to be blandly denied in the interests of any cowardly subservience.
Indeed, I suspect that there would be less of this disturbing music around if passions among audiences ran higher, not lower. It must have been a great moment for Berlioz too when his Parisians stopped booing the 'Seventh'. Perhaps his own fiercely bracing melodic fortitude partly emanated from having to force Beethoven across. The fracas at the original 'Rite' performance probably showed Stravinsky exactly what he had achieved. I myself never enjoyed Sibelius till I had come to terms with his moral message, mostly through bitter experience. So I do not regret abhorring him once for the same reasons which impel me now to admire him. The concert-going public should be as little ashamed of

walking out on Webern as they are of switching off skiffle.—Yours, etc.,
Bristol
JOHN R. DAVIE

Thinking in Numbers
Sir,—Mr. W. J. Eady states (THE LISTENER, December 17) that any prime number, which when divided by 4 gives remainder 3, is expressible as the difference of two squares. But this has nothing to do with prime-ness, for the class of all odd numbers, of which his series is a subclass, has this characteristic. In fact, one can define the series of odd numbers (which includes all prime numbers) as the series of differences between consecutive squares: the square of 1 minus the square of zero is 1; the square of 2 minus the square of 1 is 3; the square of 3 minus the square of 2 is 5, etc.—Yours, etc.,
Spinkhill
THOMAS CONLAN, S.J.

Standards of Measurement
Sir,—In speaking of the standards of measurement (THE LISTENER, December 10) Dr. Sutherland notes the interesting fact that 'The earth rotates more slowly from October to March than from April to September', and adds that 'the reason for this is not known'. Surely the explanation should present no difficulty. In order to simplify the exposition, textbooks usually misrepresent tidal action by assuming that the attracting bodies are not in motion. In reality, however, they are moving in orbits round the common centre of gravity, and in orbital motion variation in gravitational attraction expresses itself in terms of orbital

velocity. Thus the point of the Earth closest to the Sun, where solar gravity is somewhat stronger, will tend to have a somewhat higher orbital velocity than the point that it farthest away. This results in a tidal couple opposing axial rotation.

Now, between October and March the Earth is in the perihelic part of its orbit, where the Sun is somewhat closer and the tidal couple correspondingly stronger than in the aphelic part of the Earth's orbit that falls between April and September. It is obvious that, being under less restraint from this source, the Earth should rotate somewhat faster in the latter period.

Yours, etc.,

V. A. FIRSOF

Art—anti-Art

Sir,—I have been following the talks on this subject, reprinted in recent numbers of THE LISTENER, and, as one whose generation saw the advent—and, as we thought, the passing—of Futurism and Dadaism, I find it incredible that these cults should now be revived, albeit under new names, and that apparently it has again become an article of faith among the *avant-garde* to treat art as public enemy No. 1, and to seek its destruction.

During the first quarter of this century I and my friends joined eagerly in the revolt then boiling up everywhere against the tyranny of established academic conventions. When Futurism and Dadaism began to make their impact felt we were delighted for we, too, found the cultural attic of our day cluttered intolerably with junk that had escaped the bonfire too long, and when they urged that, to get rid of the junk, we should burn down the house as well, we found their audacity refreshing and amusing.

Not for one moment, however, did it occur to us that they were in earnest about this, or that we were expected to take quite seriously all the other rousing things they said and did, and it was not very long before we came to regard them as having passed into history with so many other crazes of that time (roller-skating was one of them, I remember!).

Any regrets we may have had about the passing of Futurism were soon tempered by the realization that, in its final stages, it had helped to give birth to Fascism, but this could not be held against Dadaism and, when we remembered it at all, we thought gratefully of how it had encouraged us to put fireworks under the tail of the establishment, so contributing to the gaiety of the times.

Had we realized however that both the Dadaists and the Futurists were in solemn earnest about the destruction of art, and that—as is now suggested—the deadliest of their ideas might still have to be reckoned with seriously one day, we would, I am sure, have asked why, if art was anathema to them, they did not simply refuse to have anything to do with it; why, instead of driving themselves to distraction in the attempt to replace it by new forms of visual, verbal or sonant expression (thereby running the risk of setting up another form of Art that would, in its turn, have to be destroyed some day) they could not have taken up some more congenial occupation which had nothing to do with art—building demolition, for instance!

Having learned from their protagonists that the anti-art faction still feels the same way—or, apparently, even more so—about things, and finding it no easier to understand their reactions

than it would have been to understand the Dadaists and Futurists had we taken them at their face-value, I feel the time has come at last to seek an answer to that very question which we omitted to put to the Dadaists and Futurists. In asking it today, however, I consider we have a right to a more explicit and convincing answer than we could have looked for thirty years ago, for surely, with so many other fields such* as that of nuclear physics open to them, the anti-art boys ought to be prepared to turn their backs for evermore on art of every kind and leave what survives of it to those who regard it as one of the human heritages most necessary to preserve in this increasingly unstable world. If the destruction of all existing manifestations of art is really one of their objectives, they should not overlook the possibility that, one day, 'the Bomb' may achieve this very end for them with a thoroughness which—if they are still alive after the dust has settled—may make even them wonder whether destruction is indeed such a good thing.—Yours, etc.,

Hatfield

G. BERESFORD CAMPBELL

'They Met on Good Friday'

Sir,—While I see little point in arguing with critics of my work on questions of value, sometimes I cannot resist taking them up on fact. Mr. Rodger (THE LISTENER, December 17) insists on treating my programme about the Battle of Clontarf as a 'documentary'; this reminds me of a book reviewer who regarded a poem of mine about the Eumenides as a 'travelogue'. No matter: on the documentary level Mr. Rodger asserts in one and the same paragraph (a) that I stick 'to the old romantic thesis' about the Vikings' movement westward and (b) (now going romantically Wagnerian himself) that these Vikings 'were much more heroic, much more pathetically tragic' than I portrayed them. So far as I can understand him, I misrepresent the expansion of the Vikings by making it both too 'formless' and too pre-calculated. But which?

Anyone who has studied the Icelandic Sagas and their background knows the straightforward, practical reasons why the Norwegians emigrated to that country and the very hard-headed way in which they behaved when they got there. Most of the time, that is, they were not Wagnerians. On the other hand, the evidence makes it unlikely that *all* this sudden spraying out of the Vikings over Europe (and to America!) can be explained in terms of Mr. Rodger's 'ecology'. It would appear that like many men of action (warriors or athletes) the Vikings were prosers one moment and the next—or simultaneously—poets. Just one other point of fact: an age did *not* die at Clontarf. Plenty of Vikings stayed on in Ireland and flourished there. And King Canute was still to take over England.

Yours, etc.,

London, N.W.1

LOUIS MACNEICE

Africa by the Africans

Sir,—Your 'spoken word' critic, Mr. David Paul, asks (THE LISTENER, December 17): 'When are we to have a programme on Africa today (whether song, dance, life, personality or politics) chosen, presented, and produced by Africans?' The programme he was reviewing was nearly the last in the Third Programme series on contemporary West Africa. Of the eighteen programmes in this series, four were

talks given by Africans, four were stories read either by their authors (three of whom were Africans) or by African readers, six were documentaries in which all the speakers (over fifty in all) were Africans, and the commentators in two of them were African. The remaining four programmes were talks on subjects such as law and medicine where the colour of the speaker is presumably immaterial and happened to be white.

Over half of the studio-produced programmes were produced in Africa by Africans (and recorded by African technicians). The most recent is a programme of modern Nigerian music chosen, presented, and produced in Lagos by Fela Sowande. The general editor for the series was a European, one who has lived in Africa for more than twenty years and who, for the purposes of collecting material for this series alone, visited eleven of the fourteen countries in West Africa.—Yours, etc.,

London, W.1

P. H. NEWBY

Controller, Third Programme

What is Life?

Sir,—I would like to counterbalance to some degree the comments made by Mr. Hilary Corke (THE LISTENER, December 10) in criticism of the television programme 'What is Life?' broadcast on December 1.

The main criticism was that it was over-complicated. This was probably so in the case of the viewer with no scientific education, but I think the object of the broadcast was to teach those with some science more, rather than those with no science some.

However, speaking as a biologist I doubt if the programme could have been made any simpler without being as far from the truth as a silhouette in the dark is from the lighted picture. The root of the trouble is that even fundamental biology is complicated, and you must start with the fundamentals.

Yours, etc.,

Warrington

E. A. ELLIS

John Brown at Harper's Ferry

Sir,—In THE LISTENER of October 29, under the heading of 'Did You Hear That?', the author of 'John Brown at Harper's Ferry' inquires whether the bloodshed at Harper's Ferry achieved anything, and answers his question by the astonishing statement that 'it neither advanced nor retarded the cause of abolition or the coming of the American Civil War two years later'. On few subjects are responsible historians so much in agreement as in the view that the Harper's Ferry attack, followed by the hanging of John Brown, lighted fires of deep and tragic antagonism all over the country that greatly strengthened the hands of the extremists and silenced the moderates on both sides, especially in the South, so that the whole nation was soon engulfed in the Civil War.

It is useless to speculate on what would have taken place had John Brown not made his abortive attempt to free slaves by force, but surely it is wide of the mark to say that John Brown's execution 'neither advanced nor retarded' the catastrophe of Civil War that swiftly followed.

Yours, etc.,

Spokane

BENJAMINE H. KIZER

* 'Pierrot and Harlequin', by Derain, on our cover this week, is from Derain, by Denys Sutton (Phaidon), and is reproduced by permission of SPADEM, Paris.

Thinking in Numbers

Measuring Vast Spaces

By R. van der RIET WOOLLEY
Astronomer Royal

I SUPPOSE you all think that it is a long way from the Earth to the Moon: in fact it is a quarter of a million miles. But this is a small distance in comparison with the distances with which astronomers are concerned. For example, the distance from the Sun to the Earth is about 90 million miles. But even this is an extremely small distance as far as we are concerned. The fact is that the stars are very much further away than either the Moon or the Sun; indeed, they are so far off that light, which moves 186,000 miles in a second, takes three-and-a-quarter years to get from us to the nearest star.

Light Years

In a good deal of popular descriptions of astronomy the unit of a light year is used: this is the distance which light travels in one year, and if one used the unit of a light year one would say that the nearest star, Alpha Centauri, is three-and-a-quarter light years away. But astronomers do not, in fact, use the unit of a light year—which is irrelevant to their purposes; instead they use a rather strange unit which is called the parsec. It is so called because an object which is one parsec away from us has a parallax of exactly one second arc. By parallax I mean the angle subtended at a base line by the star, a base line being the diameter of the Earth's orbit round the Sun. As the Earth progresses, we move from one side of the Sun to the other, a distance of twice the 90 million miles I spoke of—that is about 180 million miles; and so we move from one end to the other of a very long base line. Just as surveyors can find out the distances of objects on the other side of a river without crossing it, or the height of a mountain without going to the top, so one can determine the distance of a star if one has a long enough base line and uses the parallactic angle. If the parallax is exactly one second of arc—sixty seconds of arc make one minute, and sixty minutes make one degree—then the star is distance one parsec away.

When this unit of distance was invented by the late Professor Turner at the beginning of this century, I suppose people thought that with parsecs to deal with there was no difficulty about describing astronomical distances. But the fact is that many of the objects in which we are interested are much further than one parsec away—in fact we have had to introduce the kiloparsec, or 1,000 parsecs and, worse still, the megaparsec, or 1,000,000 parsecs, in order to be able to describe comfortably the sort of distances in which we are interested.

When I lived in Australia, I used to recommend to people that they should go outside and look at the Milky Way. One can see the Milky Way quite well in England if one goes out at the right time, though it is not so clear as it is in the south: there one can see a great arch of light stretching over from one end of

the heavens to the other, which on examination with a large telescope proves to be a great collection of stars and of gaseous matter. The Milky Way is what we call a galaxy, a large collection of stars; and one of the points in which we are interested is: where is the centre of this galaxy and how far is it away from here? The answer currently accepted is that it is about ten kiloparsecs away, and the whole galaxy is rotating in such a way that where we are here, near the Sun, it takes 100 million years for us to go round. (We think we have been round about 100 times.) This is an example of a rather large distance—ten kiloparsecs; but even this is small in comparison with some of the other distances in which astronomers now work.

The Magellanic Clouds

In the southern hemisphere, if one looks at the Milky Way one can see two detached portions of it which are called the Magellanic Clouds. They are sort of annexes to our own galaxy; they, too, consist of large collections of stars and dust and gas, and they are thirty kiloparsecs away. You might think that with thirty kiloparsecs we have gone a long way from here, but this again is nothing in comparison with the distance from our galaxy to the next. The nearest large galaxy to ours is one in the constellation of Andromeda; it is generally known as the Andromeda Nebula. The distance from our nebula to the Andromeda Nebula is of the order of a megaparsec—that is to say 1,000,000 parsecs. There are many more extra-galactic nebulae known much further off than the Andromeda Nebula and, indeed, the further one is able to probe the heavens with one's telescope the more of these extra-galactic nebulae one sees, and the more there is need for very large units in order to describe these distances.

Statements about the Remote Past

I think the real interest in contemporary astronomy is that we are able to make statements at all about such very large distances—distances so large in comparison with the metre, a convenient description of a man's height; and that we are able to make statements about the very remote past, the past of 100 million years ago or even the past of 10,000 million years ago.

The ideas of the remote past come into contemporary astronomy because we are now actively studying the question of stellar evolution. Instead of supposing that the stars were all formed at about the same time—10,000 million years ago—we are now investigating theories of stellar evolution which suppose that some at least of the stars—the very blue giant ones—are quite young. This sort of study is carried out by examining closely the relative numbers and the relative colours and brightnesses of the different stars in a galaxy—such as, for example, the Magellanic Clouds. I feel that the business of contemporary astronomy is to investigate these large distances in these great periods of time, and to make certain that the deductions that we make about them do hang together and are coherent.

Useful Devices

By M. G. KENDALL

LET ME DIRECT your attention to two simple but effective tricks that the scientist uses to cope with his measurement problems. First of all, he is never afraid to invent a new unit. For astronomical distances even 1,000,000 miles is very small. So instead of expressing distances in miles and having to write an enormous number of noughts after all our figures, we merely choose a new unit, the parsec. This can be expressed in miles if we like, but as a rule we do not like. By this simple device of choosing a new unit we can bring the numbers we are talking about down to reasonable dimensions.

The other device arises from the flexibility of our system of numerals, by which we write down what are called the powers of numbers. For example, the square of a number is that number multiplied by itself; the cube is the number multiplied together three times, and so on. Thus the sixth power of 10, written as 10^6 is 1,000,000; that is to say, ten and ten multiplied together six times.

If I wanted to write down the approximate distance from here to the centre of the Milky Way in miles I should have to write a 2 followed by seventeen noughts. The eye cannot absorb figures like this. But if I write it as 2 times 10 to the seventeenth power— 10^{17} —the number becomes concise and meaningful. It is an astonishing thing that we can write down accurately the size of the known universe with a few strokes of the pen.—*Network Three*

My Grandmother

She kept an antique shop—or it kept her. Among Apostle spoons and Bristol glass, The faded silks, the heavy furniture, She watched her own reflection in the brass Salvers and silver bowls, as if to prove Polish was all, there was no need of love.

And I remember how I once refused To go out with her, since I was afraid. It was perhaps a wish not to be used Like antique objects. Though she never said That she was hurt, I still could feel the guilt Of that refusal, guessing how she felt.

Later, too frail to keep a shop, she put All her best things in one long narrow room. The place smelt old, of things too long kept shut, The smell of absences where shadows come That can't be polished. There was nothing then To give her own reflection back again.

And when she died I felt no grief at all, Only the guilt of what I once refused. I walked into her room among the tall Sideboards and cupboards—things she never used But needed: and no finger-marks were there, Only the new dust falling through the air.

ELIZABETH JENNINGS

Sir Stanley Spencer, R.A.: 1891-1959

By WILLIAM TOWNSEND

STANLEY SPENCER'S prize composition of 'The Nativity' has hung in the Slade School for most of the time since it was painted in 1912, while succeeding prize works have accumulated round it. Though composed of elements of diverse and uncompanionable origin it hardly seems an eclectic student exercise on a theme chosen by someone else. One feels now that Stanley Spencer was already in command of what was most important to his art, that he saw already 'The earth, and every common sight . . . Apparellled in celestial light'—and that his confidence in this vision enabled him to use with a sure purpose whatever ideas came to hand. The excitements of Post-Impressionism were in the air, but the elements from Gauguin are absorbed as smoothly as those from Puvis de Chavannes and the Pre-Raphaelites, without any suggestion of experiment with novel ideas or new ways of making pictures. What is remarkable is the consistency with which each detail is penetrated by a mood.

This is only to forecast the situation of the artist as it is fully revealed in the works of the nineteen-twenties, 'The Resurrection' (1923-26) and the Burghclere murals. As I remember it when it was first exhibited in 1927, to a student treading the mill of keeping up with the *Ecole de Paris*, 'The Resurrection' was a disturbing work. It was so direct and positive an affirmation of a wildly unfashionable view of what art could be; and yet it had to be reckoned with.

The picture was shown in a gallery where, appropriately, it was difficult to see it as a whole. It is a picture one need never see as a whole but, after threading through in all directions, one may feel it to be a completed presentation of its theme. It is not a decorative object, nor any kind of object in its own right, so much as a vehicle for the communication of a vision from the artist to the spectator. It is as though Spencer's vision of a transcendent world, entirely figured out in the world he knew at Cookham, was of such overwhelming importance that art could only be for describing it just as it was. Seen in terms of the men, women, bushes, river and churchyard of Cookham it was describable, too, in all its details (*e.g.* in the work reproduced above). Laws of composition, acquisitions of skill, distortions of form were useful only to render the vision more explicit.

If this is so and the works have power and authority, as they have, then they are strangely at variance with any direction in which art has been going for a long time. They are works without self-doubt; works in which no conflicts of the artist are evident, as his idea emerges; in

which the creation of the work itself is of no concern to us, where formal logic hardly interests us and where the paint is without sensuous appeal or eloquence—no pictures are less a love-affair with paint. Only the theme may engage us and, if it does, we find it is not of the kind that invites our contribution; it consists entirely of clear statements of a sur-



'Christ Carrying the Cross' (1920), by Stanley Spencer

Reproduced by permission of the Trustees of the Tate Gallery

prising sort. The best of Spencer's work has intensity and an entire naturalness that make one accept the presentation of a deep personal experience in particularized and localized terms. It is possible to believe that this is one of the ways in which things could be.

And so the success of these pictures must bring us up against a key question: whether after all the painter has inevitably been robbed by other media of his ability to communicate, in terms fairly close to common currency, anything more profound than pedestrian records. A frequent reply would be that this power now resides only in isolated visionaries; that in England we from time to time get such artists who, when they rise above amiable eccentricity, may look big in the history of English art but will always be artists inimitable and unexportable and, like Blake and Palmer, children whom only we can understand; and that Stanley Spencer is one of these. I doubt if this is the answer we should give.

Sadly, for the artist and for us, these questions would not be so forced on us by many

of Stanley Spencer's paintings of the last twenty-five years. The later portraits are admirable, to be sure, and there are many remarkable things, for we are to the end dealing with a painter of great talents, a professional who was at work rain or shine and one who was never without ideas. But the artist has himself described and accounted for his decline in an article that has the pathos of a confession and the virtue, rare enough in artists' statements, of illuminating the work and fitting the facts as well. It was typical of him as artist and man not to wish to hide his loss of 'vision', still less to rationalize it into new merit. It confirms our view that after the Burghclere murals had used up the accumulated experience of the years before the nineteen-twenties, the vitalizing element was often missing. So the distortions of figures frequently appear dictated less by the will to render the unaffectedness and poignancy of truth and reveal the oddity of ordinary things than to provoke surprise for its own sake. Too often we are driven back to admiration for unceasing ingenuity and sometimes to dismay at the dry and joyless process by which patterns of tweed coats, print frocks, foliage, bricks are all reduced to a mesh-like mechanism. In some of the landscapes—he once described some of them to me as 'not real Stanley Spencers'—in the notation of innumerable details, recorded certainly with marvellous precision, there is a frightening diligence, as though this were a consolatory exercise in which he found refuge from a grief like

Ruskin's in seeing but no longer feeling the beauty that he knew. It ought not to have been quite like this. He was not an artist whose feelings dried up or whose ideas gave out; but somehow the way of painting did not hold well after the youthful exaltation was exhausted. His whole style and manner were, so to speak, hand-made for one purpose alone and seemed not to be adaptable to new ways of feeling and new requirements, nor to fructify his whole life's experience. He had a style for description of unique occurrences but needed later a style more for exposition, such as Léger possessed, that could enlarge itself. In Spencer we regret what was diminished into eccentricity.

But it would be wrong to emphasize the eccentricity while his masterpiece at Burghclere remains so little known. Of course it has to be visited. In the meantime his village of Cookham enters with a host of its inhabitants into an English countryside that English men and women can have in their heads by their fireside with White's Selborne and Palmer's Shoreham and Constable's Vale of Dedham.

Short Story

And there was Evening and there was Morning

By HEINRICH BÖLL*

IT was not until midday that he had hit upon the idea of leaving the Christmas presents for Anna in the luggage-office on the station. He was pleased at having thought of this, because it relieved him of the necessity of going home straight away. Now that Anna wasn't speaking to him any more, he was afraid to go home; her silence rolled over him like a gravestone as soon as he entered their flat. Before, for two years after their wedding, he had looked forward to going home; he had loved eating with Anna, and talking to her, and then going to bed; most of all he had loved that hour between going to bed and falling asleep.

Anna used to get to sleep before he did, because she was always tired now, and he would lie in the dark beside her and listen to her breathing; and sometimes car headlamps would shoot beams of light over the ceiling of the bedroom, beams which would dip as the cars reached the brow of the road, ribbons of bright yellow light which for a moment cast the profile of his sleeping wife on to the wall; then darkness descended over the room once more, and there was nothing left but the pale circles, the pattern of the curtains marked out on the ceiling by the gaslight of the street-lamp. He had loved this hour more than any other in the day, for he could feel the day slipping away from him, and himself slowly sinking into sleep, as though into deep water.

* * *

Now he strolled hesitantly past the luggage office, and saw his box at the back, still standing between the red leather case and the covered flask. The open lift coming down from the platform was empty and white with snow; it sank like a leaf of paper into the grey concrete expanse by the booking-office, and the man who had been working it came round to the front and said to the attendant, 'It's proper Christmas now. Nice for the kids to have some snow, eh?' The attendant nodded, spiked tickets on to a nail without a word, counted the money in his wooden drawer, and looked over suspiciously at Brenig, who had taken the luggage-slip out of his pocket, only to fold it up and put it away again.

That was the third time he had been there, the third time he had taken out the slip and then put it back again. He was embarrassed by the suspicious glances of the attendant and strolled over to the exit, stopped there and looked out on to the deserted forecourt. He loved snow and cold—in his boyhood he had always been drunk with the ecstasy of breathing in the clear, cold air—and now he threw away his cigarette and held his face to the wind, which was driving hundreds of feather-light snowflakes into the station.

Brenig kept his eyes open; he liked it when the flakes stuck to his eyelashes, new flakes replacing the old when they melted and ran down in little drops over his cheeks. A girl went quickly past him, and as she ran across the forecourt he saw her green hat getting covered with snow; it was

not until she was standing at the tram-stop that he recognized in her hand the small red leather case which had been standing beside his box in the luggage-hall.

* * *

'You shouldn't marry', Brenig thought. 'They congratulate you, send you flowers and stupid telegrams, and then they leave you on your own. They ask you if you've thought of everything—kitchenware from salt-cellar to gas-stoves; then they make sure that the bottle of sauce is in the cupboard as well. They work out whether you can support a family—but what it means to ~~BE~~ a family, nobody tells you that. They send you flowers, bunches of them, so that it smells like a funeral; then they chuck confetti over you and leave you on your own'.

* * *

A man walked past him, and he heard that the man was drunk and singing a carol; but Brenig did not alter the position of his head, so it was only after a little while that he noticed the man was carrying a flask in his right hand, and he knew that now the cardboard box of Christmas presents for his wife was all alone upon the top shelf in the luggage-office. There was an umbrella in it, a couple of books and a big piano made of chocolate; the white keys were marzipan, and the black ones were pure toffee. The chocolate piano was as big as a dictionary, and the assistant had said that the chocolate would keep for six months. . . .

'Perhaps I was too young for marriage', he thought, 'perhaps I should have waited till my outlook was a bit more sober, and Anna's a bit less'. Yet he knew that it had been sober enough, and that Anna's soberness had been just right: he loved her for it. For the sake of that hour before going to sleep he had given up pictures and dances, had broken appointments. As he lay in bed at night, a feeling of holiness and peace descended on him, and he often repeated to himself that text, whose words he no longer knew exactly: 'And God created the earth and the moon; and he called the light Day, and the darkness he called Night; and God saw that it was good; and there was evening and there was morning . . .'. He had made up his mind to check the text in Anna's Bible, but he kept forgetting to do it. That God had created light and darkness seemed to him at least as splendid as the creation of flowers and animals, and of man.

He loved this hour before going to sleep above all else, but now that Anna was not speaking to him any more, her dumbness was like a weight on him. If she had only said, 'It's got colder', or, 'I think it's going to rain . . .' he would have been released—if she had only said, 'Yes' or 'No', or even anything much more foolish than that, he would have been happy, and going home would hold no more terrors for him. But there were moments when her face would turn to stone, and it was at these times that he suddenly realized what she would look like when

she was an old woman; frightened, he would imagine himself all at once projected thirty years into the future, as though on to a stony plain. He saw himself aged, as well, with a face just like those of certain men he knew: lined with bitterness, convulsed with stifled pain, and with a hint of jaundice running through their features to their very nostrils—masks, scattered through everyday life like skulls. . . .

And then sometimes, although he had only known her for three years, he knew what Anna had looked like as a young girl; he saw her, a little girl of ten, dreaming over a book in the lamplight, blinking at what she had read, grave-faced, her eyes dark beneath her fair eyelashes, her mouth open. Often, when he sat facing her at meal-times, her face changed like those pictures that change when you shake them, and all at once he knew that she had sat exactly like that as a child, carefully mashing her potatoes with a fork, and letting the gravy trickle slowly over them.

* * *

The snow had almost stuck his eyelashes together, but he could still make out the number four tram which came gliding silently over the snow, like a toboggan.

'Perhaps I'd better ring her up', he thought, 'then she'd have to speak to me'. The number seven would be coming straight after the number four; it was the last one that evening. But he was freezing now, and walked slowly across the forecourt, saw the blue, brightly lit number seven some way away, stopped undecidedly at the telephone booth, and then looked into a shop-window, where the dressers were replacing Father Christmases and angels with other dolls—women, in evening dress, their bare shoulders sprinkled with confetti, paper streamers strung round their waists. Elegant gentleman dolls with grey-streaked hair were hastily placed on bar-stools, champagne corks were strewn over the floor; one doll had its wings and curly hair taken away, and Brenig was amazed at the speed with which an angel could be changed into a barman; a moustache, a dark wig; and then in a trice a slogan was nailed on the wall: 'New Year's Eve—and no Champagne?'

Here, Christmas was over even before it had begun. 'Perhaps', he thought, 'Anna's too young as well; she was only twenty-one'. And as he looked at his reflection in the shop-window he saw that the snow had covered his hair like a little crown—he had seen it like that before on top of railings—and he realized that those old people were wrong when they talked about the happiness of youth; when you were young, life was so serious and difficult, and you never got any help; and all at once he felt astonished at himself for not hating Anna because of her silence, or wishing that he had married someone else. The whole gamut of phrases they handed out to you didn't mean a thing—forgiveness, separation, starting afresh, time will help—all these words didn't help you at all. You had to see the thing through on your own, because you

were different from other people, and because Anna was different from other people's wives.

The window-dressers were briskly nailing masks up on the walls, and threading crackers on to a piece of string. The last number seven had gone ages ago, and the box of presents for Anna was all alone upon the shelf.

* * *

'I'm twenty-five', he thought, 'and I have to be punished so severely for a lie, a stupid little lie, the kind thousands of men tell every week or every month. When I look into that stony future, I have to see Anna squatting like a sphinx in front of the stone desert, and myself an old man, my face yellowed with bitterness'. Oh, yes, the bottle of sauce would always be in the cupboard, and the salt-cellar in the right place; he would have been made branch manager long ago and be able to support his family well—but they'd be a family made of stone, and never again would he be able to lie in bed in that hour before going to sleep and wonder at the creation of the evening, and thank God for the great gift of sleep; and when some young people got married, he would send them telegrams as senseless as the ones he had received. . . .

Other women would have laughed over such a stupid lie because of its very nature; other women knew that all men lied to their wives. Perhaps it was a sort of natural self-defence against which they invented lies of their own; but Anna's face had turned to stone. Of course, there were books on marriage, and he had read in these books to see what you could do when something went wrong with your marriage, but there was nothing in any of the books about a woman who had turned to stone. They told you all about how to get children and how not to get them, and what they said was fine and impressive, but they didn't give you the one little phrase you wanted.

* * *

The window-dressers had finished their work; paper streamers had been hung over wires fixed out of sight; and he saw one of the men disappearing through the back of the shop, with two angels under his arm, while the other emptied one last packet of confetti over the bare shoulders of the dolls, and gave a final little adjustment to the placard which read 'New Year's Eve—and no Champagne?'

Brenig brushed the snow out of his hair and walked back over the station forecourt into the booking-hall; and when he had taken out the luggage slip and smoothed it for the fourth time, he ran, ran as fast as he could, as though he had not a moment more to lose. But the luggage office was closed, and there was a notice hanging up on the grille: 'Open ten minutes before arrival or departure of a train'. Brenig laughed, laughed for the first time since lunch, and looked at his box up there on the shelf, behind bars, as though it were in prison. The timetable was hanging by the office, and he saw that there would not be a train for another hour. 'I can't wait that long', he thought, 'and I won't even be able to get any flowers, or chocolate, or a book at this time of night, and the last number seven's gone'. For the first time in his life he thought of taking a taxi, and he felt very grown-up, and a bit silly at the same time, as he ran over the forecourt to the rank.

He sat in the back of the car, holding his money in his hand; eleven-and-ninepence, that was all he had left, and he had kept it by to get something special for Anna; but he hadn't found anything special, and now he sat there with his money in his hand, watching the meter, which rose threepence at short intervals—very short intervals, it seemed to him—and every time it clicked it was like a stab at his heart, although the meter was only showing four-and-nine. 'Here I am', he thought, 'coming home like a silly ass, without any flowers, without presents, tired and hungry'; then he realized that he could easily have got a bar of chocolate on the station.

The streets were deserted, and the taxi travelled almost noiselessly through the snow. Inside the houses, Brenig could see the Christmas trees gleaming behind the brightly lit windows; Christmas, as he had known it in his childhood, and as he had felt it that day, seemed very remote. The important and significant things happened independently of the calendar, and in the stony desert of the future, Christmas would be like any other day in the year, and Easter like a rainy November day; thirty or forty torn-off calendars, metal holders with only ragged ends of paper, that was all that would be left if you weren't careful. . . .

He was startled when the driver said 'Here we are', then relieved to see that the fare-meter had stopped at five-and-six. He waited impatiently for the change from his ten-shilling note, and his heart lifted when he saw a light up in the room where Anna's bed stood next to his. He determined never to forget this moment of relief, and as he took out his door-key and put it in the lock, he felt the same funny sensation as he had felt when he got into the taxi; he felt so grown-up, and a bit silly at the same time.

The Christmas tree was on the table in the kitchen, and there were presents for him there, socks, cigarettes, a new fountain-pen, and a bright, handsome calendar, which he could hang over his desk in the office. The milk was in the saucepan on the stove, and he only had to light the gas under it; the bread was cut and buttered on the plate—but it had been the same every evening, even now that Anna wasn't speaking to him any more; and she had decorated the Christmas tree and laid out the presents for the same reason as she had buttered the bread; it was a duty, and Anna would always do her duty. He didn't fancy the milk, and even the appetizing bread didn't tempt him. He went into the hall, and saw straight away that Anna had turned out the light. But the bedroom door was open, and he called softly, without much hope of reply through the dark opening, 'Anna, are you asleep?'

He waited for what seemed to him a long time; it was as though his question was falling into immeasurable depths, and the dark silence in the dark oblong shape of the bedroom doorway held everything which awaited him for another thirty or forty years on the calendar; and when Anna said 'No', he thought he must have been mistaken; perhaps it was an illusion. He continued hastily and in an over-loud voice: 'I've done a stupid thing. I put your presents in the left-luggage place in the station, and when I went to get them, they were closed, and I didn't want to wait. Do you mind too much?'

This time he was sure that he did hear her

'No', but he heard as well that this 'No' had not come from the corner where their beds usually stood. Evidently Anna had moved her bed under the window. 'It's an umbrella', he said, 'a couple of books, and a little chocolate piano—well it's as big as a dictionary—and the keys are made of marzipan and toffee . . .'. He stopped speaking, listened hard for an answer, but nothing came out of the dark opening; but when he asked, 'Are you pleased?' the 'Yes' came back quicker than the two 'No's' had before.

He switched out the light in the kitchen, undressed in the dark, and got into bed. Through the curtains he could see the Christmas trees in the house opposite, and down below in that house they were singing: but he had his hour back once more, and he had had two 'No's' and a 'Yes'; and every time a car came up the road, the headlamps lit up Anna's profile out of the darkness, just for him.

—Third Programme

Noel

The sky is black, the earth is white;
—Bells, ring your merry peals apace!—
Jesus is born; the Virgin bright
Smiles on him with enchanting face.

There are no curtains in festoon
To keep the baby from the cold;
Only the spiders' webs hang down
From the old rafters of the fold.

He trembles on the new-laid hay,
The darling little child now born,
And ox and ass breathe to allay
The cold and keep the Christ child warm.

The snow sews fringes on the thatch,
But heaven smiles on Israel,
And, all in white, while shepherds watch,
The angels sing: 'Noël! Noël!'

JOANNA RICHARDSON

(From the French of Théophile Gautier)

Solutions to Bridge Puzzles on page 1118

I. Hold the first trick with the seven of spades. At trick 2 lead a club from the table. If South plays the Ace ruff and lead Ace and another diamond, ruffing the third diamond later and discarding the fourth diamond on the King of clubs. If South plays small, discard a heart honour—win the return, play a second round of trumps followed by two rounds of hearts and enter the table with the ten of spades to make the good hearts. The play fails only when hearts divide 4—1 and spades 3—1.

II. Play the King of diamonds. South held: ♠ 5 ♥ 2 ♦ A J 10 6 3 ♣ A J 8 7 5 3 After the King of diamonds the defence take two further tricks

III. Play seven diamonds, discarding two spades, four clubs, and one heart, and East is subjected to a squeeze in three suits.

The Listener's Book Chronicle

The Lamp of Beauty. Writings on Art by John Ruskin, selected and edited by Joan Evans. Phaidon. 32s. 6d.

Reviewed by SIR HERBERT READ

WHEN THIRTY-TWO years ago the late A. J. Finberg made an anthology of Ruskin's writings on art, the present reviewer deplored such a piecemeal presentation of the master's work. It seemed to a still youthful enthusiast that readers should not be given an excuse for laziness; that the sacred text should be read in its entirety, with all its eccentric insights and elaborations. Mr. Finberg protested that his purpose had been to give the indifferent public a foretaste of the pleasures they might enjoy—that the *hors-d'oeuvres* would give them an appetite for the main dish. But there are thirty-eight massive courses in the Ruskin feast and, our reading habits being what they are, almost everyone is too intimidated to begin. It is a pity, because there are very few writers in the whole range of English literature so diverse, so consistently vivid, and so often inspired—and one might add so persistently exasperating.

Miss Evans presents us with one of perhaps a dozen possible anthologies. She confines herself to the writings on art; equally interesting selections might be devoted to descriptions of nature, travel, geology, literary criticism (that was done by A. H. R. Ball in 1928), Biblical criticism, economics, education, politics, ethics, people, social welfare and personal confessions. The art critic is, of course, predominant, and art perhaps afforded Ruskin most occasions for the exercise of his incomparably exquisite prose style. It is not, however, the only Ruskin, and when the art criticism is seen in isolation, as it is in this volume, its limitations, or rather its exaggerations, are all the more obvious. For Ruskin art was 'nothing but a noble and expressive language, invaluable as the vehicle of thought, but by itself nothing'. Art criticism, therefore, is a discussion of the thought conveyed by this language, rather than an analysis of its syntax. It is true that Ruskin's art criticism is distinguished (especially at the beginning) by a remarkably acute, and for his time original, analysis of the techniques of painting and sculpture. Some of his analyses (for example, the description of Jacopo della Quercia's tomb of Ilaria di Carretto) are miracles of sensuous evocation. His visual sensibility was unrivalled, as his own drawings and descriptions of plants, landscape, and architecture indicate; but this ability was perhaps the source of a certain idiosyncrasy which makes his criticism less universal than it ought to be, considering his great learning and sensitive experience.

'The representation of facts . . . is the foundation of all art' is a dogma based on this personal predilection; nowadays we have a different dogma which is just as valid—we would say that the representation of feeling is the foundation of all art. Ruskin from the beginning confused fact with truth—and 'nothing can atone for the want of truth, not the most

brilliant imagination, the most playful fancy, the most pure feeling . . . not the most exalted conception, nor the most comprehensive grasp of intellect, can make amends for the want of truth, and that for two reasons: first because falsehood is in itself revolting and degrading; and secondly, because nature is so immeasurably superior to all that the human mind can conceive, that every departure from her is a fall beneath her . . .'. Such a conception of nature is pre-Darwinian; an idealization that does not enter into our present mode of thought. It may be that our modern relativism and ambiguity are poor foundations for art, but such as it is our 'truth' is in our consciousness, in the freedom, as Sartre would say, with which we choose our way of Being. It may be absurd to confront Ruskin and Sartre, but nothing could better illuminate the gulf that divides us from Ruskin.

Ruskin is commonly regarded as a romantic critic. Actually, as his preference for such authors as Johnson, Pope, and Byron indicates, and in spite of his deep understanding of gothic art, he was a classic critic, and for Keats's 'fallacious line' which asserts that a thing of beauty is a joy for ever, would substitute 'a thing of beauty is a law for ever'. He several times identifies 'classic' with the representation of fact or unchanging truth, which, as just noted, is his definition of art. But like Goethe, whom he also admired, he could not always distinguish 'the choir of the Muses' from 'the spawn of the Python'; and he remains, as do so many English writers, one of those irregular geniuses who continue to engage our affection long after the lapse of intellectual consent.

A word about the production of this volume: it is handsome and well illustrated but it measures nine-and-three-quarters by six-and-a-half inches and weighs nearly three pounds. The same publisher has in the past published such comparable works as the *Journal* of Delacroix and Burckhardt's *Civilization of the Renaissance* in a pocket edition that is delightful to handle and easy to read. Ruskin asked for similar treatment: *The Lamp of Beauty* should have stood against *The Mirror of Art*—Ruskin as a companion to Baudelaire.

Steps to Immaturity

By Stephen Potter. Hart-Davis. 25s.

Part of the fun, they say, of receiving a present is the pleasure of unwrapping it. The thought is suggested by Mr. Potter's Dedicatory Letter to his sister prefacing this first volume of his autobiography. He believes that children are born adult, but tied up in a parcel the bindings of which, all too tight to begin with, are gradually released. Only when all the wrappings are untied does the child appear as a grown-up. Thus Mr. Potter unravels the first twenty years of his life—by which time he has reached what he calls 'general immaturity'. The process is worth watching partly because in the matter of parents, uncles, and aunts, as well as school-masters, he has rich and entertaining material

to work on, and partly because most of his early life was lived in the pre-1914 era—what has come to be thought of as another and, to those who never knew it, an unbelievable world.

Born in Wandsworth at the turn of the century, he untied his first knot by the discovery of books and of the fact that books had authors. Further release came with different modes of travel—travel with an iron hoop ('wooden ones no good'), travel on roller skates, travel by tram, though not at this stage travel by motor car. His first schools, holidays at Worthing, Swanage, and Purbeck, 'the possibility of being made good by a church service', days at Warlingham with Uncle Jim and Uncle Herbert, visits from Uncle Josh (when he appeared 'it was as if the foot-lights were turned on, the overture begun')—all contributed to the process of unwrapping.

So to Westminster School as a day boy—unwillingly perhaps but certainly not creeping like a snail: from bed in Wandsworth to Chapel in Westminster Abbey in thirty-four minutes. Education came to him mostly through side-doors—the reading of Dickens (and later Keats) and the love of music. Just as the war ended he received a commission in his grandfather's regiment, the Coldstream Guards. Was the next unwrapping process to take place in an office or, in his father's words 'Have you ever thought you would like to go to Oxford?'

Mr. Potter expresses doubts whether 'these small-scale events' will seem worth reading. Let him be reassured. The boy that was Potter lives delightfully in these pages, as do (pace some of the album photographs) the figures that surrounded him. The pleasures and pains of immaturity are faithfully recorded. They form part of the pattern, the most enduring part. The strand of innocence and affectionate response is strong and pleasing. It is one that no amount of subsequent maturity (or should one say lifemanship?) will ever be able to obscure.

ALAN THOMAS

Beyond the Mountains of the Moon

By Edward H. Winter.

Routledge and Kegan Paul. 28s.

One of the most illuminating, but little used, techniques for gaining understanding of a strange society is to record the life-history, the biography or autobiography, of typical members of that society. Most anthropological monographs analyse the society from outside into its component institutions; another dimension is given when the successive impact of these institutions on identified individuals is recounted. There is reason therefore to be grateful to Dr. Winter, now of the University of Virginia, for having followed his two analytical volumes on the institutions of the Bwamba of Uganda by the present book, which consists of a long autobiography of one Amba, Mpuga, extracts from a diary he was paid to keep (much the most illuminating section), short autobiographies of two of his three current wives, and a contrasting autobiography of a younger man who is still pagan; Mpuga is nominally Catholic and is

literate. Dr. Winter has also written a short introduction describing the main features of Bwamba society, and a concluding chapter. The book is addressed to the general reader; it has a minimum of technical terms, no native words, and the material has been organized into straightforward narratives.

The Bwamba are an agricultural society of about 30,000 people living in a small area (about 164 square miles) in the Western Rift Valley. They were organized into self-contained patrilineal villages, consisting of a group of male kinfolk with their wives and children, and, until 1920, knew no wider allegiance. They occupied a sort of no man's land between two African kingdoms; when British government control was extended to the area in 1920 they were assigned to the neighbouring Toro kingdom and an alien hierarchy of chiefs was imposed on them, they were subject to poll tax, missions and education were introduced, and the Toro started acquiring some of their fertile land. They turned increasing from a subsistence to a cash economy, making good money from coffee and cotton, and one of their forms of marriage 'sister exchange' was forbidden in favour of bride purchase; it seems, however, still to persist.

From the point of view of its effect on the psychology of the Bwamba, the marriage forms seem to be of major importance. A girl is considered the property of her father and brothers; these males want women for themselves as wives, and therefore trade their daughters and sisters either for a woman in another lineage ('sister exchange') or for a bride-wealth of goats which they can then use to purchase another woman. The girl's tastes are not consulted in any way. But there are no sanctions—other than the objects given in exchange—to make these arrangements permanent; divorce is effected by repayment, or women can agree to be 'captured' by a man who has taken their fancy. The children, however, belong absolutely to their father and, once weaned, do not follow their mother on her peregrinations. In consequence, all families tend to be 'broken', and it would appear to be rare for a child to reach maturity with both his parents living together. Mpuga had had eight wives—two dead, three divorced, three living—by the age of about fifty; Kihara, some fifteen years younger, had had nine—three dead, three divorced, three living—nearly all of whom had had children.

It would seem likely that it is this absence of a stable family which accounts for the rather unpleasing characteristics of the Bwamba; they portray themselves as without affection, promiscuous, touchy, litigious (as soon as law-courts were available), malicious, motivated only by lust, greed, and a fear of being 'shamed', and with many character traits which in Western society would be considered paranoid. They have the widespread African belief in malicious witchcraft, all misfortunes being due to the supernatural machinations of others; but among the Bwamba it is always near kinfolk who are suspected of being witches and, it seems clear, nearly all of them do practise malicious witchcraft against their nearest and dearest.

Typical is an entry in Mpuga's diary: 'I scolded Koke [his wife] for allowing the goats to wander and to ruin other people's food. Later when I was walking along a path, I hurt my foot on a stone. I knew she had sent witchcraft after me'. The only other society described

in anthropological literature, to my knowledge, whose members exhibit such marked psychopathic traits are the Dobuans studied by Dr. R. F. Fortune.

Dr. Winter, unfortunately, does not possess anything like Dr. Fortune's psychological sophistication or anthropological skills. The autobiographies were collected through an interpreter and it is perhaps on account of this intermediary that the language is so excessively flat: not a metaphor, not a proverb, no personal idiom, no signs of emotion, little exploration of obscurities. Nor does Dr. Winter seem to have grasped many of the implications of the material he has collected. But because it is presented in such fullness the reader can make his own deductions; and the picture drawn of this strange way of life has an intrinsic interest.

GEOFFREY GORER

Some Shakespearean Themes

By L. C. Knights.

Chatto and Windus. 18s.

Professor Knights enjoys Shakespeare; and I suppose that rules him out of court as a serious critic—for some readers and writers of criticism. He finds Falstaff funny and seems never to hint that he is a Dying God or Vegetation Emblem or a Fertility Artifact—though he does find serious content in his funninesses. It occurs to Mr. Knights that Shakespeare's plays are intended first for the stage and only secondly for grubbing about in in some chilly study.

This book does what its title suggests; it studies various themes in the plays and poems of Shakespeare. They are described thus: time and change; appearance and reality; fear of death and fear of life; the meanings of nature; and the meanings of relationship. After excellent argument which will persuade all but the most benighted, he concludes: 'What I have tried to suggest is a point of view from which Shakespeare's plays can be seen as related parts of a continuous exploration of the reality that is common to all men'; and 'he is concerned not with speculation about the ultimate nature of things, the relation of mind to matter and so on, but with the question of value as it can be known and embodied under the conditions of life as we know it'.

King Lear fits into Mr. Knights's scheme of things as 'the great central masterpiece', and he would argue that in this play Shakespeare solves the problems that had led him to the writing of earlier plays and that, after *Lear*, his 'freedom from inner tensions' enabled him to write, with 'assured judgment'; such plays as *Macbeth*, *Antony* and *Coriolanus*.

This book is to me stimulating, important, enjoyable, useful; I'd recommend it to every intelligent reader of Shakespeare. I use the word 'useful' with some deliberation because I find myself being forced to read too many Shakespearean books which seem to me intelligent, apperceptive and so forth—and showing how clever the author is, without answering any particular questions that I want to ask about Shakespeare. You finish Mr. Knight's book not only full of admiration for him, but also with increased knowledge of his matter-in-hand.

I don't quite know where we have to put Mr. Knights. Is he a Leavite? He goes through a number of the Leavitical processes and occasionally (to my sorrow) uses Leavitical jargon ('Of

these disturbing depths Shakespeare, being a poet, became more and more aware'). He speaks politely of Dr. Leavis, of Mr. Traversi, of M. Fluchère, as well as others, non-Leavites, such as Professor Wilson Knight, whom I cannot make much use of. But he lacks the gritty Ishmaelite calvinism of his former master. He writes in decent English. He finishes up with conclusions that seem to me to make sense. And he is able to resist the temptation to become air-borne with Mr. Wilson Knight and with him to soar to tracts unknown.

'Many critics spend a lifetime of happy and successful seeking after the non-existent', if I may be pardoned for quoting myself. Too often I see the Shakespearean critic don his diving-helmet, descend into the deep, emit enormous bubbles, rise again to the surface and hold up, while thousands cheer, what seems to be nothing more than a couple of wet empty hands. If you are going to find something that is not entirely of the surface, some people will unavoidably not agree with you that what you have found is really there. Mr. Knights is a below-the-surface man; I for one find myself seeing the hidden things which he claims to bring up from his disturbing depths.

Professor Knights's main argument I find persuasive. I am even more grateful to him for assistance he provides me with individual plays. Now that I have read him on the subject of *Henry IV, Part Two*, I am inclined to feel that I have been underestimating this play. Mr. Knights succeeds in giving me a new vision of it. Other readers will, I am sure, find other gifts to thank him for.

Sanity, clarity, percipience go to the making of this fine book; and I think that any reader who failed to derive great pleasure and profit from it would have to possess extraordinary dullness of soul.

JOHN CROW

Economic Fluctuations in England, 1700.

1800. By T. S. Ashton. Oxford. 21s.

This eagerly awaited book is an amplified version of the Ford Lectures, delivered by Professor Ashton in 1953. The author sets out to provide a background before which students may place their own accounts of particular industries or movements. A subsidiary purpose is to discover how far back into the eighteenth century we can trace the phenomenon later to be called the trade cycle.

The core of the book is statistical, and eighteenth century statistics are notoriously difficult to handle, partly because they are often incomplete, partly because of the haphazard manner in which they were compiled. Professor Ashton has evolved a new technique for dealing with this statistical material, and displays a unique ability to blend it with evidence from contemporary literary sources.

We are here concerned with a pre-industrial economy which to a large extent is self-sufficient. The forces which give rise to ebb and flow of economic activity involve natural conditions to a great extent. So Professor Ashton begins by describing the impact of the weather through the eighteenth century, and the immense influence of good and bad harvests. On the whole the weather 200 years ago seems to have been worse than in our own day, although in 1759 Horace Walpole writes of 'this most Gorgeous of all summers'.

Besides the weather and the harvest, economic life in the eighteenth century was affected by wars and other political crises of a nature relatively rare in the nineteenth century. Events connected with war or domestic politics explain some of the crises Professor Ashton has discerned, while others occurred mainly because of evolutionary developments in the international economy.

Sometimes wars and dearth coincided, sometimes exports expanded as a result of government expenditure abroad. Fluctuations in diverse parts of the economy did not always coincide. Capital investment had a much smaller impact on the economy than in the nineteenth century; but the eighteenth century boom was apt to be checked by the immobility of labour, and could be dramatically reversed by the accident of a bad harvest.

There is an appendix of twenty-three statistical tables, from which the interested reader can draw his own conclusions. These also provide material against which he can judge Professor Rostow's thesis that the 'take-off' period of our economy should be dated around 1783.

Clearly, indeed delightfully, written, Professor Ashton's work gives a masterly survey of eighteenth-century England from an unusual angle. This is one of those rare books that give pleasure to the general reader while being indispensable to the professional historian. The methods used here might well be adopted for the study of other pre-industrial economies in earlier periods and in other countries.

ALICE CLARE CARTER

**The Gospel According to Thomas
Collins. 18s.**

'The Gospel according to Thomas' is the title found at the end of a short treatise of some twenty complete and continuous folios written in the Sahidic dialect of the Coptic language contained in a papyrus codex of the fourth century A.D., which forms part of the remarkable discovery of Gnostic writings made in Upper Egypt in 1945-6.

The 'Gospel' consists of a series of alleged sayings of Jesus: authorship is attributed to the apostle Thomas. The text has been represented hitherto, though not recognized under this title, by three fragments of Greek papyri from Oxyrhynchus, the first of which was edited by Grenfell and Hunt over fifty years ago and has been the subject of much discussion since that date.

The sayings—114 of them according to the division of the present editors—follow one after the other without narrative and without apparent logical sequence. Some are to be found almost word for word in the synoptic gospels, the absence of close parallels from John being a noteworthy feature of the compilation. Others clearly echo the gospels and include versions of some canonical parables like that of the sower or of the marriage feast. Some of the sayings are known from quotations in patristic literature; others are completely new.

There has been great interest in the work from the time of the announcement of its discovery. Not only is the work important within the context of the subject of Gnosticism and apocryphal literature in general, but containing as it does elements of an early second-century written, and even earlier oral, tradition it is also important source material for all who are interested

in the problems of the transmission of the text of the New Testament.

The full Coptic text was made available in photographic reproduction by the Antiquities Department of Egypt a couple of years ago. Partial and full translations have already appeared elsewhere on the basis of the Cairo facsimile. The present edition, the first to contain a full printed text collated against the original with a literal and accurate line-by-line translation, is the result of collaboration between distinguished scholars who were among those invited to Egypt in 1956 by the Director of the Coptic Museum in Old Cairo, where the codex is now preserved, to discuss the publication of the find as a whole. It is an instalment of a projected volume, delayed we are told for technical reasons but promised 'in the near future', which will contain full commentary and discussion of the problems raised in the text. The aim of the instalment is to provide in advance an authoritative text and translation.

It will have, and deserves to have, an enthusiastic welcome, which will, however, be tempered with regret that the editors have not been more generous. It is not unreasonable to expect with the text volume an index of the Greek and Coptic words, some general description of the manuscript, discussion of the criteria used for its dating, and definition of the principles followed in the translation, which in places could have been more literal, for instance in its choice at times of English tense and in its following of the distinctions of the Coptic word order. It is legitimate to wonder, as one handles this slim first offering, whether, in view of the great interest in the text, it would not have been advisable to have planned a less ambitious and more speedy first edition, following the precedent of the equally important Manichaean find, where the task of establishing and translating the text was entrusted to individual Coptic scholars and not a team of specialists from different disciplines.

For the general reading public the briefness of the preliminary remarks and references will be a disappointment. More is said on the book jacket than in the book about the exciting lines of research now opened up. Publication on the instalment system can be a little like the never-never; meanwhile, will our dust covers last so long?

A. F. SHORE

**The Diaries of Lord Lugard. Edited
by Margery Perham and Mary Bull.
Faber. 3 vols., £8. 8s. the set**

Three years ago Miss Perham published the first part of her life of Lugard. The second part is still awaited. Meanwhile she presents, with the aid of a subvention from the Uganda Government but nevertheless at a high price, a by-product of her earlier volume in the shape of Lugard's private diaries for the two and a half years from November 1889 until August 1892. This was the period of Lugard's service with the Imperial British East Africa Company, the Chartered Company predecessor of imperial rule in East Africa. Lugard was the Company's representative in Uganda. To establish a government, he had three European assistants, and at all times fewer than 1,000 soldiers and armed porters. Such is the background to the diaries. They run to 1,000,000 words. With the excep-

tion of ten passages of a private character they are printed complete.

There is no denying the quality of the presentation. Maps, commentary, calendars, biographical notes, indexes, are all first rate. The only question is whether in these days of cheap microfilm the editors have been right to abdicate the responsibility of selecting for the general reader the matter which is of real significance. The whole of the first volume, and half of the last, are essentially concerned with the herding of loaded porters over the 800 or so miles between Mombasa and Kampala. There is nothing, original about this. All the explorers did it, and most of them were better at describing their experiences than Lugard, whose eye for the visual scene was poor and whose interest in anything but the work in hand was infinitesimal.

It is true that these sections include some interesting material on Lugard's relations with his superior officer, Sir Francis de Winton, and with Sir James Macdonald, who later conducted the inquiry into his administration of Uganda. But both these matters have been most adequately handled by Miss Perham in the biography, and there was no need whatever to repeat it all here at such tedious length.

The diaries which are of historical importance as well as of really absorbing interest are to be found in the second volume and in the first half of the third. They cover the period of his actual residence in Uganda from December 1890 until June 1892. The African kingdom of Buganda was at this time in one of those exceptional moments of historical evolution, comparable to the Civil War in England or the Revolution in France, when detail may be almost endlessly pursued without giving rise to boredom. An *ancien régime* was passing. The forces of the revolution were embattled under the banners of two Christian denominations. A largely superseded Islam provided a third faction, ancient animism a fourth. Lugard, try as he might, had not the force to be impartial, and whatever his private views about 'these damned Protestants', he was obliged to lean on them in every crisis and to pay the price in subsequent concessions to their cause.

There is already a considerable literature, both modern and contemporary, about the Buganda revolution, and the coming of the British. Miss Perham's biography is an example of the first, and Lugard's own *Rise of our East African Empire* of the second. Both of these are based on the diaries. Yet they do not begin to exhaust the diaries' interest. Lugard's judgments of people and politics are as lively and penetrating as his *safari* journals are dull and trivial. African personalities come alive in them almost as well as Europeans. Conversations, arguments, quarrels, deceptions, are all reported tirelessly and with a singular simple honesty which the subtler minds of the Catholic and Protestant missionaries, our other main informants, were alike incapable of achieving.

The diaries have another great merit. They were composed for Lugard's own use and not for the public eye of his own or any future time. It is against his expressed last wishes that they have now been published. There could be no better guarantee of an author's good faith in reporting a situation of intense and impassioned controversy.

ROLAND OLIVER

CRITIC ON THE HEARTH

Weekly comments on B.B.C. programmes by independent contributors

Television Broadcasting

DOCUMENTARY

No Shortage of Reportage

PERHAPS IT IS an essential asset of the good reporter that he should over-react. Take a balanced view, and goodbye to his *métier*. For the ordinary intelligent mortal, however, today is uniquely itself, no doubt, but it is more importantly a link in a chain of todays stretching unimaginably far behind and (let us hope) before us. News is not history. If today's newspaper is not worth reading tomorrow, then the philosopher can hardly find it worth reading today. Information is not perishable goods like tomatoes. If it is not going to be 'history' in fifty years' time, then it is not history now. 'The Duchess of Swanborough made history today by being the first peeress to drive a hearse'. Ah, did she now?

One aspect of this is that the reporter generally manages to be surprised, or at any rate to simulate surprise, at what really is not surprising at all (which is not quite the same thing as the preservation of the childhood sense of wonder recommended to, and by, poets). During the past weeks we have revisited battlefields of the late war, first with Wynford Vaughan Thomas, then with Frank Gillard, and now (December 16) with Robert Reid. And every time Mr. Frank Vaughan Reid has presented us with a take of a pin-bright housing-scheme, or a lido, or a coppice, and asked 'Who would think, looking at all these kiddies (or girlies; or caterpillars), that only fifteen years ago, etc., etc.? Was it all a dream?' Pause for visible process of sagacity. Then, 'No, it wasn't a dream', and fade in to reel of grim documentary. Who would think? In fact, dear F.V.R., practically any member of the community, male or female, of thirty years of age and over; and all those of any imagination who are younger. There is nothing startling: the new flats go up on the gun-site, the Venuses strip on the landing-beach, the bomb-hole is quilted with

cow - parsley. We all know this, it is part of the universal experience of maturity; and it does not need a high-powered reporter and a B.B.C. Film Unit team to tell us.

Pleasant enough, mildly entertaining, discursive and low-pressured, these three programmes were neither distinguished nor distinguishable; and indeed Mr. Frank Vaughan Reid (whom it is therefore not unfair thus to portmanteau) seemed himself depressedly aware of the impermanence of news. In fact one sat politely through the contemporary sequences (the château that used to be the company head-



'After the Battle': above, massed pipe bands of Scottish regiments parading in Rome ('Anzio to Rome' on November 25); below, Robert Reid (left) welcomed by the Mayor of Vire ('St. Lo to Paris', December 16)



quarters, the interview with the ex-resistance leader) for the sake of the war-time shots, as highly charged emotionally as ever. What was needed to give the programmes bite was a much closer correspondence between the two sets of images. Only Wynford Vaughan Thomas, in 'Anzio to Rome' had really made the effort to ensure that his cameras were placed in just the same positions and at just the same angles as their war-time predecessors. His contribution was distinctly the best, for this and other reasons.

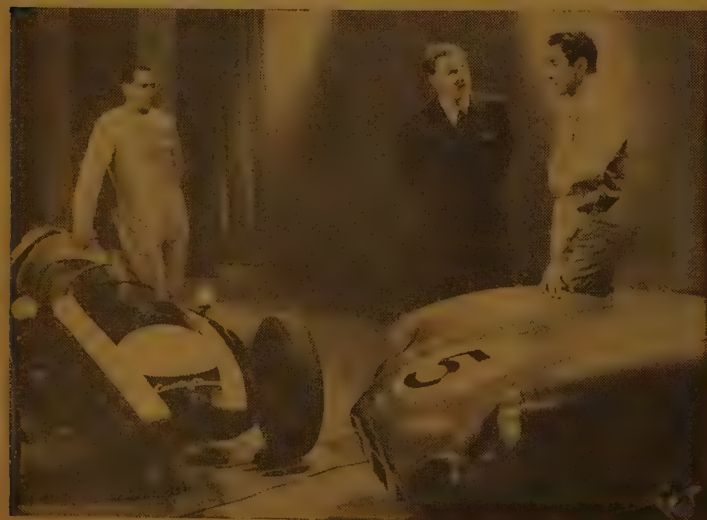
A minor grumble: should not foreign reporters really be a little handier with foreign place-names? One might do better, I should think, than to rhyme the cathedral of Paris with bloater game.

The first 'After the Battle' programme was in

the hands of Edward Murrow, whom I found at the time over-hysterical in his delivery. I still hold to that: but at least he managed to get as much tension into the Modern half as into his Ancient, a feat not remotely emulated by his successors. On December 12, however, we saw him in the exercise of his proper function, as organizer of almost scandalously controversial conversations. This time he had brought together three generals, British, American, and German, to discuss the conduct of the war. The German had commanded the defence of Cassino, and Monty and his American counterpart had previously met him only at the wrong end of a gun. This was a disturbing experience. It was all too like a post-mortem in the changing room after the match, between rival rugger captains; and though generals must know as well as, or better than, the rest of us, that there are certain differences between war and rugger, that awareness somehow failed to make itself quite convincing in the programme. This conversation is being transmitted in two halves, and at the time of writing I have not yet seen the second portion.

Why do we watch sport? Not primarily, I believe, to observe skills; but for the element of contest, the uncertainty of result, and the pleasure of the overall pattern—the long flats and plateaux of tension that mount suddenly to unexpected peaks of real excitement. In a retrospective survey of 'highlights' these things are lost necessarily: results are foreknown, suspense is suspended, and the sight of ten knock-outs in two minutes reminds one less of the ring than of the slaughterhouse. However, these things must be; and Peter Dimmock's 'Sports Review of 1959' (December 16) was, on its own terms, admirable.

On December 14 Patrick Moore contributed a well-conceived little programme on the possible astronomical explanations of the Star of Bethlehem. And on December 16 'Tonight' informed us that the current French Christmas gift is a special 'night-coloured' wig to wear while watching television. No wonder the French—but readers must complete this sentence for themselves.



Peter Dimmock (centre) with Jack Brabham (left) and Roy Salvadori in 'Sports Review of 1959'



From the Langham Group's production of *Mario*: Jaqueline Noble as Pauline and Earl Green as Mario, and (right) Ernst Ulman as Omar and Joan Sterndale Bennett as Mrs. Foster

John Cura

DRAMA
Experimentalist Venture

WOE BETIDE DRAMA when its directors start talking like critics. Hearthside animadversions on 'proscenium presentation' and demands for thematic 'orchestration' are all very well, but coming as they did from Anthony Pélissier as an introduction to his second Langham Group production, *Mario* (December 15), they struck home as words of ill-omen.

Plenty of hard things have already been said about this tricky improvisation on Thomas Mann's story, *Mario and the Magician*, and I should like to put in a brief reminder that the group's entry into experimental television with last May's performance of *The Torrents of Spring* was one of the most auspicious events of the year. Advance announcements of that occasion were modestly practical, relating to such things as properties and the use of one camera to each scene; any residual suspicion of pre-tentiousness was extinguished by the clarity and physical impact of the playing.

Neither quality reappeared in *Mario*. Retaining the surface characteristics of the earlier production it denied them their original expressive purpose: creative drama thus hardened into stylistic affectation. Like *The Torrents of Spring*, *Mario* employed an elaborate soundtrack, combined naturalistic crowd scenes with obsessively selective camera-work, and gave a modern English setting to a period Continental narrative. Bringing Turgenev's novel up to date is a perfectly legitimate procedure, for its theme is applicable to any society. But Mann's

story cannot be given the same Procrustean treatment; its grotesque alignment of nightmare and normal life is intimately related to place and time—Mann goes out of his way to emphasize its essentially Italianate character. What is the point of exchanging Torre di Venere, the seaside battleground of German and Italian nationalism, and the splinter-toothed mountebank Cipolla who demonstrates that 'the eighteenth century is still alive in Italy', for a mock-up of Southend with rock-'n'-rollers invading the Palm Court and a fairground wizard whose lineage extends no farther than Abanazar?

It is not as though the production had taken merely its basic idea from the story; incidental detail had also been implanted in the English setting where its glaring inappropriateness required explanations that were not forthcoming. What, for instance, was *Mario* himself, the passionate Sicilian, doing there?

Once begun, there would be no end to such questions, for a thick fog engulfed the essential action. Introduced in flashbacks by a group of four journalists, it proceeded with a fine disregard for clarity and dramatic immediacy. There would be an argument for this departure from straightforward exposition into pointillism if the screen had been sprayed with clue images; but the succession of waistcoat buttons, suitcases, tobacco pouches, and walking feet were as irrelevant in suggestiveness as they were deficient in narrative rhythm. Dialogue was virtually abandoned, and at every promise of an illuminating remark one could be sure that a roar of traffic, sea-front, or of café music would swell up to drown it.

The device of abruptly freezing a scene into a still photograph served equally to dam up the action; and although the companion trick of showing a series of stills against a continuous sound-track made an interesting novelty, it again had little to do with dramatic expression. Only the performances of Miss Joan Sterndale Bennett, as a dowdy mother hypnotized into revealing her riotous youth to a fairground audience, and of Ernst Ulman, as the daemonic illusionist, managed to cut through the dense packing of cotton-wool.

It may be objected that this is harsh treatment for an experimentalist venture; television is

not regularly given to excursions into the unknown, and the terms of an experiment are that it may fail. The answer to this is that some experiments are not worth making; those conducted in a void stand no chance of success. Of the productions that have enlarged the scope or increased the definition of the instrument—Rudolph Cartier's production of 1984, Nigel Kneale's *Quatermass* serials, the plays of Chayefsky, and, to a lesser degree, the Langham Group's own first production—all have made technical innovations in obedience to the demands of expression. Severed from those, the quest for 'pure' radio, 'perfect' cinema, or 'essential' television is a lost cause.

A persistent regret throughout the year is for productions of uncommon quality that pass into oblivion in the instant of performance. The telerecorded revival of last year's *Cinderella*



Charlie Drake (standing, left) in *An Evening with Charles O'Casey* on December 16

(December 15) made one wish for a more frequent recourse to the archives. C. E. Webber's book cunningly translates pantomime into television while excluding the element of theatrical knockabout. A second view confirmed my admiration for Peter Sallis's amiably ineffectual Baron and the unaffected charm of June Thorburn as the deadliest Prince-catcher of them all.

IRVING WARDLE

Sound Broadcasting

DRAMA
Into the Room

VAL GIELGUD'S FORMULA for the broadcasting of Greek plays is now proved. For his rendering of Sophocles's *Antigone* (Third, December 17) he employed a new text by Professor C. A. Trypanis and the music of John Hotchkis. Once again a chorus directed by Colette King made contemporary comment on the action, with a trace of that pseudo-religious mumbling which used to be the fashion.

Mr. Gielgud has so stamped the style for the presentation of Greek plays that we shall soon forget that they were ever done in any other way. He persuaded Mr. Hotchkis to provide music which did not drown the words or attempt to transmit its own message but which acted as a complement to the words. He also knew when to eschew musical comment; and Creon's discovery that he cannot fly in the face of the gods was played coldly so that only the face of Brewster Mason carried the message of the King's growing terror. Both Mr. Mason and Joan Plowright, who played *Antigone*, brought



June Thorburn as Cinderella

home the fact that Antigone's steadfastness and Creon's tyranny are still subjects of debate in the heart. Professor Trypanis gave them a translation which was workable in our present idiom but they, too, gave us a translation. This was not a stage production, nor was it an imaginary recording of a performance in the arena. It was a production that brought Creon's tragedy across the centuries to the convention of the lone listener in the quiet room.

Another work that blossomed in the room was *The Boy and the Bus* (Home, December 17), a splendidly imaginative piece by Emile Gardaz. The boy (Patricia Hayes) starts travelling in a country bus and transforms the vision of a bored old bus-driver (Norman Shelley) who has long ago ceased to see anything remarkable in his journeys. Where the driver has seen nothing but a dull road and dull passengers, the boy sees a life of wonder. The journeys become flights in magic airliners, the horses in the bus horse-power become real in the boy's imagination. The passengers evoke music in the boy's mind. Alan Paul supplied the music that interpreted the boy's thoughts and Audrey Cameron produced the work, which ranks as one of the most charming pieces of the year. Cynthia Pughe translated it, and she ought to be hunting for more work by Mr. Gardaz. There is a shortage of his kind of imagination.

Those who want to know how to adapt a novel that is studiously literary should study Lance Sieveking's adaptation of Nancy Mitford's *Christmas Pudding* (Home, December 12). I did not expect much when I sat down to listen. But Mr. Sieveking had picked up the novel bodily and remoulded it into a dramatic form. The eloquence and wit of the novel remained, and the unspoken arrogance of Miss Mitford's characters was heard. The infuriating thing about her characters is that one starts by hating them and ends up in sympathy with them. One cannot help admiring their wit. They are fatuous, trivial, and socially expendable but they are, perversely, extremely good company.

Christmas Pudding recounts the ridiculous doings of two house parties in the nineteen-thirties. It could have sounded like a period piece but Miss Mitford clearly had an eye for the abiding farce rather than for the fleeting folly. Mr. Sieveking's adaptation made me feel that it is the theatre's loss that she did not choose the play instead of the novel as her form. Her frolic inherits Wilde and overshadows Coward. She is damnably unfashionable in a socially realist world but she is great fun. Archie Campbell mustered Fabia Drake, Terence Longdon, and Sylvia Coleridge, who spoke as if they were looking down their noses, which was exactly as it had to be.

Rather unseasonably, I feel I must end on a carping note. The programmes for Christmas as usual fail to provide any really worth-while dramatic experience. Though there is a work by Supervielle and a play by J. B. Priestley there is nothing with any pageant about it. At Christmas even the television addicts would be glad to listen to something rich and good with their eyes shut.

I suspect that the custom of not producing any large work at Christmas must have begun in the days when plays could not be recorded and a play production meant the attendance of actors in the studio during the holiday. Plays can now be recorded and put out at will, and I should have thought that something majestic like one of Raymond Raikes's productions or one of Val Gielgud's Greek tragedies might have found a place in the schedule. But perhaps we are still too Puritan for pageantry.

IAN RODGER

THE SPOKEN WORD



Together and Apart

THE TWO OUTSTANDING ITEMS this week were portraits in dialogue, and, as does sometimes happen, they formed admirable pendants to each other, illustrating two opposite ways of approaching life today: on the one hand, trying to live together in a 'new' community of mutual understanding and tolerance; on the other, simply escaping (for a while at least) from what looks like the sterilizing onset of a mechanical civilization that threatens to 'process' humanity into standard units.

In 'People Today' (December 15, Home) Wyn Knowles had compiled a remarkably concentrated and winning portrait in which voices of pupils, friends, and colleagues combined to pay tribute to Ted Braithwaite, a West Indian from British Guiana, who seems to have left a memorable impress on all the people he has worked with. In despair at not being able to find an opening in this country for his training as an engineer, he volunteered to teach; and soon found himself confronted with a formidable class of hard-bitten adolescents in a typical East London school. Within a few days he had knocked them cold. Parents testified how their children, at first all agog to have a coloured man as teacher, were soon 'obviously happy and strangely good'. His class voted him a 'toff', and the word seemed to fit all his qualities: style, cordiality, tact, and understanding.

One was left to guess between the lines exactly how much personal bitterness had to be overcome in the face of obstruction, evasion or open hostility. Even more remarkable, though, was the fact that having broken down all the barriers in one sphere, Ted Braithwaite very soon transferred to another, where there were fresh ones to cope with. He is clearly someone with a social vocation, who definitely looks for obstacles—and finds plenty as a Welfare Officer, chiefly concerned with immigrants to this country. This was a vivid and well-built picture.

On December 17 (Home) the interview with Wilfred Thesiger, about himself and 'The Empty Quarter of Arabia', which he twice crossed on foot, was a question-and-answer affair, with a routine stiffness which always attaches to this kind of presentation. But the material itself was fascinating. Where a Braithwaite dedicates himself to the cause of 'this new multi-racial community which is Britain', a Thesiger goes in search of a people that lives in archaic simplicity, preserving its own tribal purities and feuds. But the vocational urge—passion even—was obviously just as strong in this case.

And for this traveller, life in the desert was neither a romantic fetish nor a scientific object—even if the official pretext of his first journey into the great void of south-west Arabia was simply research into the origin of locust swarms. What obviously moved him was the spectacle of human life lived with dignity on the fringe of the possible, according to rules as old and dateless as those of the Old Testament. And the beauty and ruthlessness of this world certainly came across. Here was a whole people with feelings incredibly sharpened by the desert's 'sounding board', able to read a world of facts into a flicker on the horizon, a slur in the sand; as absolute in their courage or panic, their greed or hospitality, as the climate that ranges from blinding heat to annihilating cold between day and night.

I'm beginning to wonder if any metaphorical road has ever been quite so trodden, not to say trampled, as the road to the Summit. We've all been there and back—metaphorically speaking—so often, that a special 'Radio Link' (December 17, Home), devoted to 'The Western Approach

to the Summit' was bound to prompt cynical expectations which, in my case, were certainly not confounded by the event. Yet this was a full-dress occasion: all sorts of distinguished persons in the know at Chatham House putting knowledgeable questions to Herr Brandt in Berlin, M. Schumann in Paris, Senator Cooper in New York; and a faultlessly smooth production. But not all that Robert McKenzie could do in the way of bright, tactful, prodding chairmanship at any time prompted a flicker of surprise. You could see those answers looming up, even before the questions arrived.

DAVID PAUL

MUSIC



Singers and Players

ON TUESDAY, December 15, two of the finest singers at present working in this country displayed their gifts to our great enjoyment: the one Alexander Young, a London man who treats English with exquisite justice and respect, the other Richard Lewis, a Welshman from Manchester who also does nicely by our language. Between them these two represent the male element in British singing as we should wish it to be displayed before an inquiring visitor from other countries. Mr. Lewis sang Britten's *Serenade* (Third Programme), and, as always when anyone other than Mr. Peter Pears sings Britten's music, one has a feeling of relief because of the welcome realization that the music, so closely woven round that personality and technique, can in fact be expressively sung by other men; as was the case that night. Barry Tuckwell was the hornist, and there again was the same sensation of relief, as one felt that though it is tragic that Brain will not be heard again, there is one man, perhaps more than one, who can take his place with perfect adequacy. Within a few minutes Mr. Young was on the air (Home Service) giving a performance of Schumann's *Liederkreis* (the earlier cycle of nine songs), and showing that he can deal as poetically with German as with English. It was an outstanding example of fine lieder singing, mellifluous in motion, direct in expression and always warm and keen in tonal quality.

Colin Horsley being indisposed, Margaret Kitchin instantly stepped into the breach and played one of the works as announced on December 14. (Third Programme)—Tippett's piano sonata which was stimulating to hear again after a long silence. For the Bax pieces Miss Kitchin substituted Fricker's *Variations*, Op. 31, a work with which she has been closely connected. This was all gain for the listener, for although it would have been good to hear the Bax, this new piano music by Fricker, which Miss Kitchin played with verve and understanding, proved an exhilarating example of contemporary writing for that instrument. It is fine piano writing because Fricker uses the keyboard as a source of individual, characteristic tones and textures and not as a mere vehicle for patterns that would sound as well on some other instrument or collection of instruments, say an orchestra, as with Albéniz in the intriguing but impossible *Iberia* or Mussorgsky in many of the 'Pictures from an Exhibition'. Fricker's *Variations* are unthinkable away from the piano or, be it said, in any performance less stylish than that given by Miss Kitchin.

Last Thursday's concert of music for chamber orchestra (Third Programme) contained masterpieces by Ravel and Alban Berg. The chamber concerto by Berg for violin (Wolfgang Marschner), piano (Wilfrid Parry), and thirteen wind instruments of the Goldsbrough Orchestra received a balanced and fluent performance under Walter Goehr. For one who has heard this work only four times it begins now to yield

The Travellers' Patron

Posts with a marble head of Mercury used to be erected where two or more roads met, to point the way.

Mercury in modern guise (of travel agent or such) still points the way; to—
where shall it be?

The choice is limitless, the decision often difficult.
Whether to tread again the paths
of delightful yesterdays, or to set forth on ventures
new or routes unknown—to succumb to whim or to pursue
delights already proved.

Au secours! Help and advice
is indeed at hand, for the modern
Mercury is yours to command.

Watch for the variety of suggestions and services
offered by Holiday Resorts, Travel Agents, Air
Lines and Shipping Companies in "The Listener"
next week, December 31, also January 7 and
January 14 (which is the Travel Book Number).

To help you in your choice "The Listener" again
offers its services. If you require fuller information
from more than one advertiser, a single postcard
to us will bring all the information you seek.

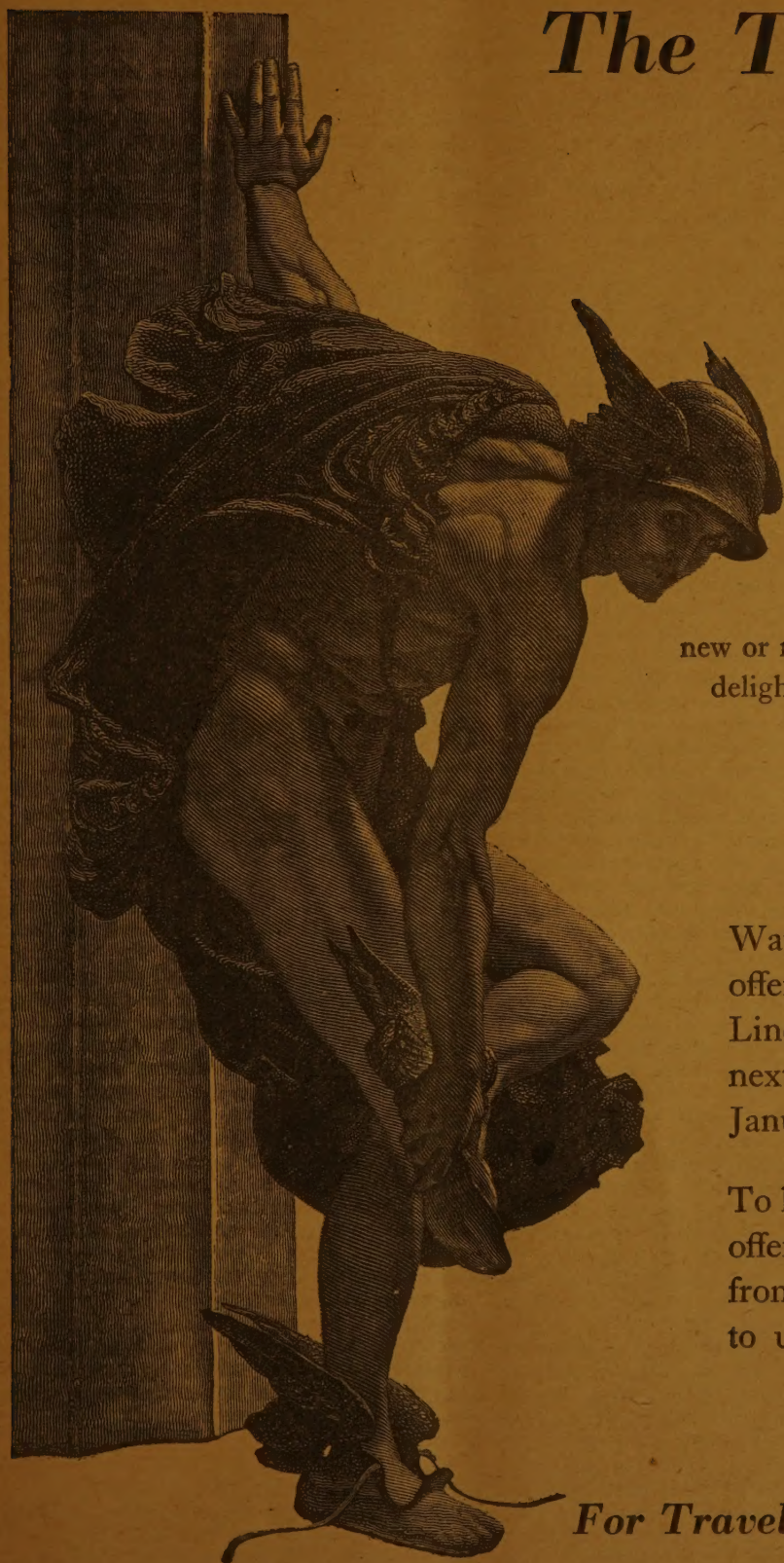
For Travel & Holidays in 1960 read

The Listener

December 31

• *January 7*

• *January 14*



its meaning; one ceases to be puzzled and finds oneself discovering beauties of texture and tone; something I have not so far been able to do with Bruno Maderna's second serenade, the fourth work in this concert. Berg wrote his concerto for Schönberg's fiftieth birthday, a prodigious tribute to one master by another. It is a work, as Berg put it in his letter of dedication, of virtuosity and brilliance alike for players, conductor, and composer; he might have added, for the listener too, who may well feel that his own labours partake of something akin to virtuosity.

Miss Janet Baker sang Ravel's *Trois poèmes de Mallarmé* agreeably, carefully, at times apprehensively, as though she were venturing into unexplored wastes whither man or woman had never been before. It was a courageous performance rather than an effortless one. Man or woman? Which did Ravel have in mind? He did not specify but one could not but grin to hear the excellent Miss Baker, in the second song (an *abbé* addressing a princess), tackle '*Comme je ne suis pas ton bichon embarbé*'. No, indeed. How exquisite these songs are, precious in more senses than one; a

charming possession for a curious listener and, of course, words and music both, the dizziest heights of preciousity.

Stravinsky's concertino was given in its later form, arranged and, one imagines, developed from the 1920 version which was for string quartet. That night it appeared with eight-piece wind band plus violin and cello. Mr. Goehr kept the lines of the varying tone-qualities clear and unobtrusively under control. It is one of Stravinsky's ejaculatory works, spare, wiry and muscular, an offshoot from his rag-time period.

SCOTT GODDARD

Festival Music of the Middle Ages

By DENIS STEVENS



The next programme in this series will be broadcast at 10.25 p.m. on Friday, January 1 (Third); it will consist of music from Las Huelgas

A MEDIEVAL THEORIST defined music as 'the rational discipline of agreement and discrepancy in sounds, according to numbers, in their relation to those things which are found in sounds'. Reason, proportion, and a sense of relationship were by no means lacking in the systems of teaching devised for the benefit of medieval singers and composers, nor were the creations and performances of these men deficient in that broad sense of design which places the stamp of greatness on art, no matter what its period or provenance.

Misrepresenting Medieval Music

It is in many ways unfortunate that medieval music is so often presented in concerts or recitals consisting of a dozen or so motets, each lasting for only a few minutes. To do this is to suggest that medieval musical forms invariably yielded short, unrelated pieces, and that composers of the Middle Ages were quite unable to emulate the broad sweep of later tonal architects. Symphony, sonata, and concerto were unknown in the days of Perotinus and Johannes Filius Dei, but it would be unfair to claim that their brother architects, who raised monuments in stone still surviving in something like their pristine glory, were manifestly far ahead in technique and ideas. Perhaps music lagged a little behind the other arts. If it did, the state of music in the Middle Ages could not have been much different from that of later times, when an essentially luxurious and expendable form of art was expected to bring up the rear in processions as well as in account-books.

The true function of medieval music, especially sacred music, has long been misunderstood, for although certain isolated pieces of music have been held in high esteem by connoisseurs it is a fact that they have always remained isolated, like jewels deprived of their rightful artistic setting. There seems to be a lack of association and continuity, yet enough is known of medieval art in other spheres to suggest that this intellectual void may be attributed rather to modern interpretation than to ancient practice. When it is realized, however, that the framework or setting of medieval polyphony is plainsong, and that the framework of plainsong is the liturgy of Mass and Office, it becomes possible to restore these apparently unrelated musical items into an integrated and convincing pattern.

For many years it was thought that the earliest polyphonic setting of the Ordinary of the Mass was by Guillaume de Machaut. Recently, a handful of possibly earlier fourteenth-

century candidates has been produced by musical scholars, without actually helping to solve the most outstanding aesthetic and liturgical problems of integration and continuity. Composers of the pre-Machaut period, spanning both *Ars Antiqua* and *Ars Nova*, did not need to write the kind of five-movement Mass which later became almost standardized; they preferred to write the individual sections of Mass and Office in such a way that they could be combined in different fashions, just as the architects made use of prefabricated stonework capable of considerable modifications in both detail and general design. These same composers even produced parts of sections so that the number of possible permutations, within the bounds of the liturgy, was almost as limitless as the number of patterns in a kaleidoscope.

Music written originally for a cathedral or monastery or other religious house often reflects not only the liturgical customs then current but also the saint or saints to whom the building was dedicated. At Worcester, in its earliest days, Oswald, Wulfstan, and Peter were named together with the Blessed Virgin, in whose honour much of the music preserved in the Worcester fragments was first composed. At the nunnery of Las Huelgas, near Burgos in Spain, a precious manuscript of the fourteenth century containing repertory of the previous hundred years also provides an extensive collection of music for Marian feasts. Taken separately, the music has character and interest, but not continuity; it is only when an attempt is made to reconstruct at least some part of its original framework that the music begins to flow as it should. Alternating with plainsong, a two-part *Kyrie* based on the trope '*Rex virginum amator Deus*' sets the pattern for this particular form and can be said to beautify the liturgy with music that is devotional yet at the same time artistic and well-balanced. This same trope was also found in English books of similar date, reminding us of the close connexions between Spain and England in the Middle Ages. The historian and architect John Harvey has shown that the mason in charge of building Las Huelgas was probably an Englishman, and that the master-mason responsible for the south cloister of Santes Creus was certainly English: his name was Raynard Fonoyll.

The *Gloria* in the first part of the codex Las Huelgas is in three-part harmony and again makes use of a Marian trope, the well-known '*Spiritus et alme orphanorum paraclite*'. In the manner of its writing there is much sturdiness and power, as well as a subtle sense of spacing

and sonority. The Sequence, Gradual Offertory and *Sanctus* are all in two-part harmony, but *Agnus Dei* reverts to three voice-parts, all singing the trope '*Regula moris, mater honoris*'. In all cases the polyphonic sections were sung by soloists, and the plainsong by a group either large or small depending on the resources of the time and place.

The liturgy of St. James of Compostela is one of the most fascinating single examples of a medieval liturgy with polyphony that has come down to us. It was first fully dealt with in Peter Wagner's last book, written during the illness which led to his untimely death. Subsequent studies in the same field have added further valuable details enabling certain parts of the liturgy to be reconstructed with a fair degree of success. The music lends itself in part to modal interpretation, so that the well-defined pitch contours of the original can be matched by metrical patterns carrying the music forward. One of the most impressive items is the Responsory '*O adiutor*', in which two-part singing alternates with plainsong building up to a splendid climax when the final word '*portum*', set to a long melisma, is troped '*portum in ultimo, da nobis iudicio*'. The *Kyrie* here is '*Cunctipotens genitor*', and (like the Gradual '*Misit Herodes*') is in two-part harmony. A refrain enlivens the Conductus '*Annua gaudia*' and calls to mind the medieval regard for sweetness of harmony: '*Organa dulcia conveniencia sunt resonanda*'. But the most famous of these compositions in honour of St. James is the jubilant '*Congaudant catholici*', a three-part *Benedicamus Domino* trope with an active and vigorous upper line, which has been subjected to various rhythmical interpretations by scholars holding different ideas and beliefs.

More Familiar Ground

With the liturgy of Notre Dame the listener feels on more familiar ground, even if his acquaintance with the music of Perotinus has been by way of Rudolf von Ficker's colourful if not entirely accurate reconstructions, which stole the show at the Beethoven Festival in Vienna in 1927. Even when presented with comparative austerity, with a small group of soloists, an organist, and a small choir to sing the plainchant, this music is uncannily expressive and captivating. When put back into its rightful framework, the illusion of timelessness is even more remarkable, and medieval music at last begins to emerge as a work of art rather than as a labour of archaeology.

Broadcast Suggestions for the Housewife



Food for Parties

HERE ARE SOME suggestions for a party for children under five years old. (1) Traffic-light biscuits: home-made biscuits, one having three small holes cut in it, the second spread with greengage, apricot, and strawberry jams, sandwiched together so that the jam shows through the holes. (Holes can be cut with a silver thimble.) (2) 'Poached eggs': rounds of sponge cake, covered with a halved tinned apricot with a ribbon of whipped cream piped round the edge. (3) Teddy-bear biscuits: home-made biscuits, cut with a teddy-bear cutter, obtainable in most stores, dipped in melted chocolate and placed on a wire rack to dry.

For children up to twelve: (1) Miniature hot dogs: hot chipolata sausages in bridge rolls. (2) Small pastry cases filled with buttered egg and finely chopped fried bacon. (3) Sponge-cake surprises: sponge cake cut into layers, filled with tinned peaches or pears, covered with meringue, gently browned in the oven, finally sprinkled with crushed toffee.

For the teenagers' buffet party: (1) Anchovy cheese-cakes: cheese scones filled with anchovy paste mixed with butter or margarine. (2) Stuffed celery: finger-lengths of crisp celery, filled with cream cheese, seasoned with salt and pepper, sprinkled over with finely chopped walnuts. (3) Christmas apples: apples peeled and cored, brushed over with melted butter, the centres filled with mincemeat and baked in the oven. Cover with meringue and brown in the oven.

For the adults' buffet party: (1) Savoury ham rolls: slices of ham rolled round savoury rice, or chopped gherkins, capers, etc., well seasoned and served hot. (2) Winter plate: large serving dish decorated with groups of grated raw carrot, celery with mayonnaise, sliced tomatoes, mushrooms cooked and tossed in vinaigrette dressing, sweet-corn, boiled chestnuts, cold, sliced sausage. (This makes a good centre piece on the table.) (3) Mushroom flan: large, cooked flan case filled with layers of cooked mushrooms, sliced hard-boiled eggs, and cheese sauce; the last layer is of sauce. Dot with pieces of butter or mar-

garine. Brown under the grill or in the top of a hot oven. (4) Christmas tart: sweet pastry flan filled with mincemeat, covered with thin slices of apple all over the top. Baked in the oven and brushed with melted apricot jam. Serve hot or cold.

For the cocktail party: fried-bread canapés (they remain crisp when toast goes soggy). Cut the fried bread 1 to 1½ inches in diameter and cover with: (1) Cream cheese, sieved and mixed with horse-radish cream; decorate with cocktail onion sprinkled with finely chopped parsley. (2) Flaked kipper fillet mixed with creamy white sauce, topped with a stoned green olive. (3) Thin slices of brown bread and butter rolled round two or three heads of tinned asparagus. (4) Prunes, stoned, stuffed with chutney, wrapped in a piece of bacon rasher, speared with a cocktail stick, grilled and served hot. (5) Miniature pastry boats, filled with shelled prawns, mixed with mayonnaise and topped with a whole prawn.

For guests who have been asked to stay on after the party: (1) Chicken pilaff. This can be prepared beforehand and then warmed through. (2) Stuffed savoury potatoes: bake large potatoes; cut off lid, scoop out the pulp, put cooked smoked haddock in the bottom, and cover with buttered egg and creamed potato. Brown in a hot oven. (3) Scallops, poached and coated in a shrimp sauce, replaced in the scallop shells, covered with grated cheese, and browned in a hot oven or under the grill. (4) Rum apple: apple purée flavoured with rum, in a glass dish, sprinkled with crushed almond rock, covered with whipped cream. (5) Banana meringue: bananas halved lengthwise, sprinkled with rum or sherry; covered with meringue, baked in the oven, and served cold.

IRIS SYRETT—'Woman's Hour'

Mulled Wine

Put two bottles of medium-quality red wine (about 7s. or 8s. a bottle) in a saucepan. To the wine add the peel of one orange and one lemon, two to three inches of cinnamon stick, two whole cloves, and one grated nutmeg. (I put these in a

little muslin bag so as to be able to pull them out of the wine easily later on.) Bring the wine slowly to just short of boiling point, remove the peel and spices, and serve hot. If you can add a generous wineglass of orange curaçoa or one of the orange-flavoured liqueurs the mull will taste even better.

The quantities given will fill about fourteen to sixteen ordinary wine glasses. As the mull must be kept hot, try to arrange some kind of plate-warmer underneath the bowls from which it is served.

PAMELA VANDYKE PRICE—'Today'

Notes on Contributors

KEVIN HOLLAND (page 1100): formerly Lecturer in Philosophy, Natal University

D. DAICHES RAPHAEL (page 1109): Senior Lecturer in Moral Philosophy, Glasgow University; author of *The Moral Sense* and *Moral Judgment*, etc.

ROBERT WILSON (page 1111): for many years did research in astronomy at Edinburgh and in Canada; now works at the Atomic Energy Research Establishment, Harwell

E. K. WATERHOUSE, C.B.E. (page 1120): Barber Professor of Fine Arts and Director of the Barber Institute, Birmingham University; author of *Roman Baroque Painting*, *Sir Joshua Reynolds*, *British Painting 1530-1790*, *Gainsborough*, etc.

R. VAN DER R. WOOLLEY, F.R.S. (page 1123): Astronomer Royal; Commonwealth Astronomer 1939-55; author of (with D. W. N. Stibbs) *The Outer Layers of a Star*, etc.

WILLIAM TOWNSEND (page 1124): painter; Senior Lecturer at the Slade School of Art, London University; author of *Canterbury*

HEINRICH BÖLL (page 1125): a prominent German novelist and writer of short stories; author of *Traveller*, *If You Come to Spa and Adam*, *Where Art Thou?*, etc.

DENTS STEVENS (page 1134): Secretary of the Plainsong and Medieval Music Society; conductor and musicologist; formerly Professor of Musicology, Columbia University

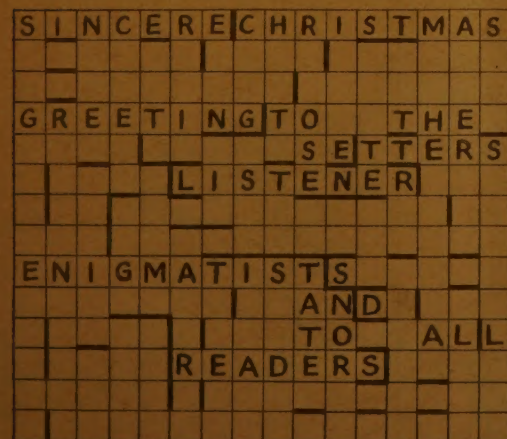
Crossword No. 1,543.

Do It Yourself.

By Tyke

Special prizes for Christmas (for the first three correct solutions opened): book tokens, value £3.3.0, £2.2.0, and £1.1.0 respectively

Closing date: first post on Thursday, December 31. Entries should be on the printed diagram and envelopes containing them should be addressed to the Editor of THE LISTENER, 35 Marylebone High Street, London, W.1, marked 'Crossword' in the left-hand top corner. In all matters connected with the crosswords the Editor's decision is final

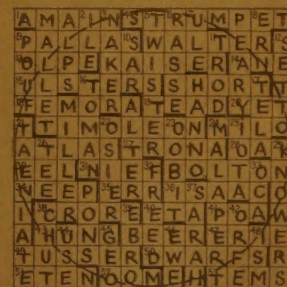


The words required to complete the puzzle are in the main part of *Chambers's* (mid-century version) or are common derivatives of such words (e.g., plurals). None is an abbreviation, prefix, etc. All help to make one's Christmas a glad time. Several accents and a hyphen are to be ignored.

NAME.....

ADDRESS.....

Solution of No. 1,541



NOTES

The unclued lights are locations on the moon. Quotation: 'He made an instrument to know if the moon shine at full (or no)', *Hudibras*, Samuel Butler.

1st prize: C. O. Butcher (London, E.4); 2nd prize: R. G. Allen (Taunton); 3rd prize: H. S. Tribe (Sutton)

Get a Degree by Home-Study

and thereby improve your status and your prospects. You can obtain a London University Degree in Arts, Science, Economics, Law or Divinity, without residence at the University. Wolsey Hall (founded in 1894) will prepare you for the necessary examinations at moderate fees. 15,000 Successes at London University Exams, from 1947. Many men and women who occupy responsible positions to-day do so because they graduated in their spare time with the help of Wolsey Hall. Why not follow their example? Write for **Prospectus** (please mention degree) to E. W. Shaw Fletcher, C.B.E., LL.B., Director of Studies, Dept. FE81,

WOLSEY HALL, OXFORD

STORIES and ARTICLES WANTED

Writers—especially new writers—are invited to submit stories and articles for *The Writer's Annual*.

There are no restrictions as regards the nature of the material, and the length may be anything up to 5,000 words. Each submission, however, must be accompanied by a stamped addressed envelope.

Minimum payment for accepted MSS. is five guineas per thousand words.

THE WRITER
124, New Bond Street, London, W.1

GRAYS BUILDING SOCIETY

ESTABLISHED 1880

Member of Building Societies Association

22 NEW ROAD, GRAYS

ASSETS £2,750,000

SHARES

4% Fixed Term 4¼%
(Society paying Income Tax)

DEPOSITS

3½% Fixed Term 3¾%
(Society paying Income Tax)

These rates are limited to investments and deposits up to £5,000 and to individuals (husband and wife treated as one)

These rates will be reduced by ½ per cent as from 1st January 1960

DEPOSITS WITH THIS SOCIETY ARE TRUSTEE INVESTMENTS



Please don't let her be disappointed

There are nearly 4,500 children in our family who depend on YOU

Will you be their **SANTA CLAUS?**

10/- will help provide Christmas fare for one child.

Christmas Donations gratefully received

CHURCH OF ENGLAND

CHILDREN'S SOCIETY

formerly WAIFS & STRAYS
Old Town Hall, Kennington, S.E.11



The Foreign Secretary

The Rt. Hon. SELWYN LLOYD, C.B.E., T.D., Q.C., M.P.

writes: "I commend to you the Methodist Homes for the Aged. There are now 400 old people in 14 Homes and there are over 700 people on the waiting-list. £250,000 is wanted for extensions and new homes. This is not a large target when we consider how good is the cause, and how much happiness and freedom from anxiety will be brought to those who have borne the heat and burden of the day."

THIS CHRISTMAS—PLEASE SEND A SPECIAL GIFT FOR METHODIST HOMES FOR THE AGED

General Secretary: REV. R. J. CONNELL, B.A., B.D.
1, Central Buildings, Westminster, London, S.W.1.

GENERAL CERT. OF EDUCATION

THE KEY TO SUCCESS & SECURITY

Essential to success in any walk of life! Whatever your age, you can now prepare at home for the important new General Cert. of Education Exam., on "NO PASS—NO FEE" terms. You choose your own subjects—Educational, Commercial or Technical. Recently announced big extension of subjects gives everyone the chance to get this valuable certificate.

SEND FOR FREE 136-PAGE BOOK
Full details of how you can obtain the General Cert. are given in our 136-page Guide—FREE and without obligation. Personal advice on request.

Write today. School of Careers, Dept. 266,
29-31, Wright's Lane, London, W.8.
"NO PASS—NO FEE"

The School of Careers

STORIES WANTED

Suitable stories are revised by us and submitted to editors on a 15% of sales basis. Unsuitable stories are returned with reasons for rejection. Address your MS. to Dept. 32.

WE TEACH ONLY FICTION-WRITING

Criticism and Courses for the discerning by specialists. For 20 years we have been receiving testimonials from full- and part-time authors, professors, doctors, high-ranking officers and officials—all types. Many of the authors you read are ex-students. Our unique system of taking 10% of your sales monies ensures our maximum efforts on your behalf. Fee returned if unearned.

The Professional Touch is FREE from Dept. 32

BRITISH INSTITUTE

of FICTION-WRITING SCIENCE LIMITED
Chronicle House · Fleet St · London · E.C.4

SERIOUS INCREASE IN COUGHING AND BRONCHIAL TROUBLES

It was reported that last Winter the increase in bronchial coughing was very great and was worrying the medical profession. This coughing is not only bad in itself, but it does lead to other things, not the least of which is a generally run down and dejected feeling. To many people Nigroids provide wonderful relief. The Ext. Glycyrrhizae in Nigroids strengthens the voice and lubricates the throat against dryness and huskiness. The Menthol in Nigroids keeps the breathing clearer and helps to unblock Catarrh. Nigroids are still only 1/- a tin; it's such a convenient size for the pocket or handbag. Nigroids, a high class pharmaceutical product, are obtainable only from Chemists.

MAKE THIS WINTER NIGROID WINTER

UNIVERSITY CORRESPONDENCE COLLEGE

Students are prepared by postal lessons for—
GENERAL CERTIFICATE OF EDUCATION

London, Oxford, Cambridge, Northern Univ. and all other Examining Boards

UNIVERSITY OF LONDON

Entrance requirements, and Degree Exams for B.A., B.Sc., B.Sc.(Econ.), LL.B., B.D., B.Mus., A.C.P. and L.C.P., Bar (Pts. I & II), Civil Service, and other exams.

The College, founded 1887, is an Educational Trust, with a staff of highly qualified Tutors. Moderate fees; instalments. ● **PROSPECTUS** free from the Registrar, 56 Burlington House,

CAMBRIDGE

SPECIALISED POSTAL TUITION for UNIVERSITY, CIVIL SERVICE & PROFESSIONAL EXAMINATIONS

A Metropolitan College modern Postal Course is the most efficient, the most economical and the most convenient means of preparing for General Certificate of Education and Prelim. exams.: for B.A., B.Sc.(Econ.), LL.B., etc., external London University Degrees: for Civil Service, Local Government and commercial exams.: for professional exams. in Law, Accountancy, Costing, Secretaryship and Personnel Management: for I.S.M.A., Inst. of Export, etc.; exams. Many intensely practical (non-exam.) courses in business subjects.

MORE THAN 250,000 EXAM. SUCCESSSES
Guarantee of Coaching until Successful. Text-book Lending Library. Moderate fees, payable by instalments.

Write today for prospectus, sent FREE on request, mentioning exam. or subjects in which interested to the Secretary (D11),

METROPOLITAN COLLEGE

ST. ALBANS

or call 30, Queen Victoria Street, London, E.C.4.



SKETCHING

for Pleasure and Profit

The easiest and most successful way is by Press Art School Postal Courses. They have trained more famous artists than any other school of the kind. Whether you are a Beginner, Advanced Student, interested in Water Colour or other branch of Art, I have a Course for you. Write for the Prospectus—it is a free Drawing Lesson in itself.

Percy V. Bradshaw, THE PRESS ART SCHOOL LTD.
(Dept. T.L.72) Tudor Hall, Forest Hill, S.E.23

TONE without equal THE CHAPPELL CHAPLETTE



HEIGHT
3 ft. 8 in.
WIDTH
4 ft. 4 in.
IVORY KEYS
SCHWANDER ACTION

£209 CASH

or easy payments

Please send for beautifully illustrated literature of Chappell Pianos and address of nearest Stockist.

THE CHAPPELL PIANO COMPANY LTD.
50 NEW BOND STREET, LONDON, W.1